

THE AMERICAN School Board Journal

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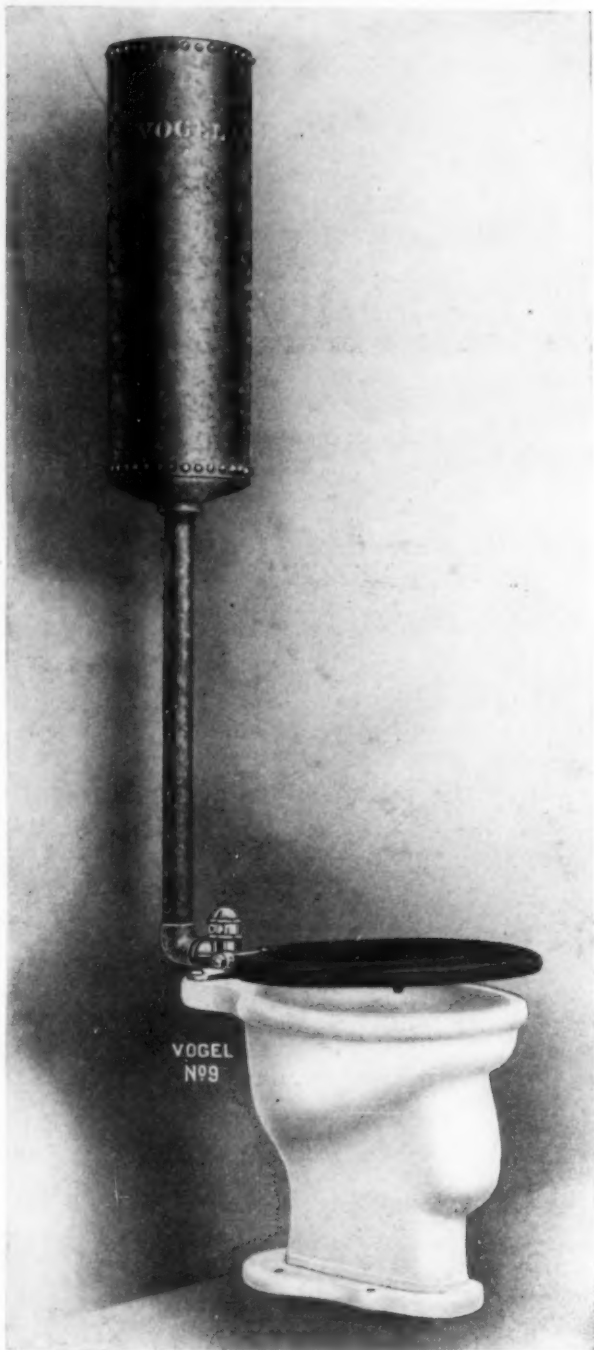


MARCH, 1922

The Bruce Publishing Company, Milwaukee, Wis.

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THE AMERICAN School Board Journal

Founded March, 1891, by WILLIAM GEORGE BRUCE

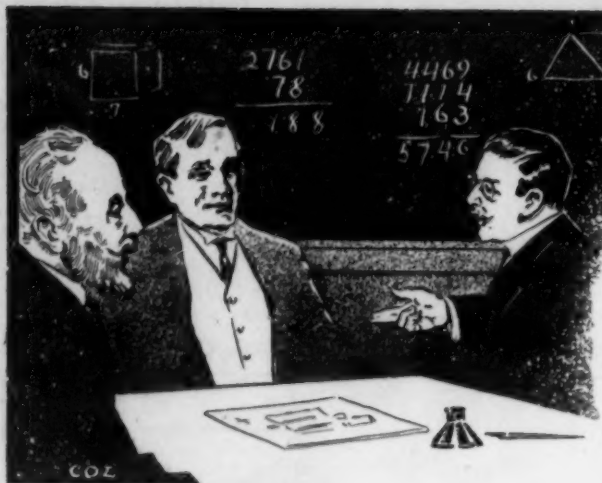
Volume LXIV, Number 3

MARCH, 1922

Subscription, \$3.00 the Year



"Hocus — Pocus"



Cardinal School Pests

5. The Trail of a Correspondent

One day last spring Principal Might got the idea that he would like to have another position. He had been in Hillbill only a year but he was migratory and he wanted to take wing.

So he obtained a copy of the state educational directory and took his pen in hand. He spent a busy evening making out a letter of application. The next morning he gave this letter to his commercial teacher with the request that she make six dozen copies on school stationery. It read like this:

Dear —
Are you going to stay in your place next year? If you are not I would like to apply but have wished to inquire from you first. I will not be in Hillbill next year. If you are going to change locations I would be glad to say a good word in your favor with the school board here.

In the meantime any favors will be deeply appreciated by

Yours very truly,
BARNARD K. MIGHT.

Then that night he spent an hour and a half penning another masterpiece which he afterwards took to his commercial teacher with the request that she make six dozen copies on school stationery.

The second letter read like this:
Clerk School Board,

Blank City:

Dear Sir: I have been informed that your principal does not intend to stay with you another year. If my information is correct I would like to make formal application for the place.

I can furnish evidence as to my scholarship and can satisfy any reasonable demands for references on character and professional skill.

I would like to hear from you if there is to be a vacancy in the principalship of your school.

Very truly yours,
BARNARD K. MIGHT.

Mr. Barnard K. Might addressed twelve dozen envelopes. One half of these went to school clerks in towns of his state where the salary of the principal was in excess of that paid in Hillbill. And on the same day the other half of these envelopes with their enclosures were sent to the principals in the same towns.

Barnard K. Might hustled over to a photographer and had his picture taken, ordering the photographer to make six dozen unmounted prints. Hereupon he went over his list of friends, both those with influence and those with none. And by dint of much thought he made out a list of references among those whom he thought would render a glowing account of himself. Barnard K. Might then rested upon his labors.

It so happened that Brundye was one of those principals who got the letter of inquiry. At that time Brundye was being considered for the principalship at Mountainview so that he was not sure whether he would remain in his present place. He was much taken up by the fair-

minded, professional tone of Barnard K. Might's letter. Brundye sat down and answered as follows:

Dear Mr. Might: Your letter about the principalship of this school came to me today. I am not yet sure whether my place will be vacant. When I know definitely I will inform you.

I shall be glad to see that your application gets a fair chance with my school board in case I am to leave here. I have always liked professional courtesy among schoolmen. I do not feel that one principal or superintendent should try to usurp the place of another until the latter has declared his intention to resign. Thus your nice manner of writing to me first strikes a responsive chord.

Faternally yours,
T. A. BRUNDYE.

On the way to the postoffice with this letter Brundye dropped in to see the clerk of his school board about something or other.

"By the way," Brundye said when their interview was over. "I got a letter from a young fellow who has the right idea on professional conduct."

"I've often heard you talk about professional conduct," the clerk returned. "What has this young paragon done?"

"He is looking for a new location," Brundye explained. "He thought this field might vacate so he wrote to me to find out. He will not apply until I let him know."

"That reminds me." The clerk changed the subject. "Speaking of vacancies, I got a letter today which says that you are going to leave us. Is that right?"

"I haven't made any plans which you don't already know. Who says that I am going to leave?"

The clerk rummaged about in his desk and brought forth a letter. "This came in this afternoon," he said.

Brundye read the clerk's letter carefully. He compared the signature to the name on the envelope he had intended to mail to Barnard K. Might. Brundye's confusion was evident.

The clerk reached over and caught hold of both missives. He too, compared the names. "I see," he said. "The young fellow who is so professional didn't wait for your answer before he put in a bid for your job. He agreed to plug for you if you would take the principalship in Hillbill and get him in here. That's rich." The clerk laughed.

So it went. Barnard K. Might's letters visited every nook and cranny of the state. Sometimes they brought forth an answer. Sometimes he was asked to apply. Now and then a prospect showed itself. Wholesale advertising has a like effect every time.

Yet Barnard K. Might did not get a better place as he had planned. Like a good many men who consider themselves unduly clever he

fell a victim of his own cleverness. He made the error which men of his stamp are prone to make. He imagined that he alone among all the principals of his state could put a clever idea across.

For superintendent Eldorman whose name Barnard K. Might used as a reference, also happened to be one of the recipients of his circular letter. Eldorman's clerk got an application on the same day. The clerk, reading hurriedly, caught the word "apply," so taking it for an ordinary application, he wrote the words "refer to Eldorman," in blue pencil across the back. Through this channel Eldorman was apprised of what Barnard K. Might was up to.

Further investigation proved to Eldorman that Barnard K. Might planned to put in applications promiscuously and then bilk the principals,—whose place he hoped to preempt,—into helping to oust themselves.

So Eldorman prepared a letter of his own and whenever a school official wrote inquiring about Barnard K. Might, Eldorman sent the correspondent the following note:

Dear Sir: Your letter asking me about Mr. Barnard K. Might is at hand. You state that he has applied for your principalship.

To my knowledge he has applied for more than fifty places within the last three weeks. I can not recommend him for I am not sure that the application was made in good faith and that he would serve if elected.

Very truly yours,
N. A. ELDORMAN.

Perhaps Barnard K. Might still wonders why his prospects all came to nothing. Yet I could tell him, and so could you if you know who he is. Nothing is more natural than that a school board member should gossip with his superintendent about the school and about the mail each gets concerning the school. So it is never safe to write letters to both, expecting that each will keep the other in ignorance of what you have said.

But Barnard K. Might found that the information he had gained had a money value. He took to selling tips on school vacancies to possible candidates for two dollars and a half each tip.

He made something in this way but it was not all to the clear. If you remember the letter he wrote to the six dozen school principals you will recall that he told each of them that he was leaving Hillbill. Many of them applied. Others told their friends, who applied. When Barnard K. Might made up his mind to stay in Hillbill he found that his school board had been deluged with applications.

And the schoolboard of Hillbill cut the salary of their principal three hundred dollars because they got the false notion that there was a great oversupply of principals out of jobs.

Better Supervision

Frank M. Rich, Principal School 19, Paterson, N. J.

The superintendent of a New York orphan asylum was much surprised one day to receive a letter from the people to whom an orphan, 15 years of age, had been apprenticed, stating that the child would never take a bath unless made to do so. His surprise was due to the fact that the regular custom at the institution was two baths a week for all children. As the child had been an inmate for about ten years, it had repeated the practice about a thousand times, and yet the habit of bathing had not been formed. On reflection, he was able to see why. In a subjective, or psychological sense, this child had never regularly taken a bath. If we analyze the complex process of taking a bath into its elements, we note the following: feeling the need of a bath; desire to satisfy that need; choosing the time, manner and conditions for taking a bath; and finally, the application of soap and water. With but one of these steps had the child anything whatever to do during the entire ten years of its life in the institution.

The illustration is typical of a prevalent kind of supervision. How many teachers go through school, take their positions, follow the courses of study and the daily program, attend teachers' meetings and even take up extension work and summer courses with as little inner feeling of need, desire to satisfy that need, or as little choice of time, manner and conditions of work as the child from the orphan asylum?

Effectual Supervision in Good Teaching.

Evidently, the highest type of supervision is not content merely to prescribe a routine and see that it is followed, but goes deeper into the sources of initiative and self-activity, and is not satisfied with its work till the subject is able to make progress under his own power. In other words, effectual supervision is effectual teaching, the application of methods whereby the learner can best acquire methods of controlling situations for himself.

Methods of effectual and ineffectual learning can be demonstrated objectively with two live pullets. Construct a small yard next to the main poultry yard, and connect the two by means of an open gate at one side. Inside the small yard set up a spiral screen in such a way that a fowl, placed in the center, can not escape till it had learned to follow the circuitous path. This is the simple lesson set for the pullet. At feeding time, put the pullet into the center of the spiral, and feed the rest of the fowls. Naturally the pullet is hungry and lonesome. It wants to get out and join its fellows and satisfy its hunger. It runs back and forth fruitlessly at first. It makes all sorts of frantic motions without success. After a certain amount of wandering, finally by accident it hits upon the right combination of turns and escapes to find its reward. Repeat the experiment at the next feeding. Escape probably occurs much sooner this time. Continue, and before many lessons the pullet will have learned to turn in the right direction at once and escape immediately.

Now try the control pullet. Put this second chicken, similar to the first in every way, into the same maze under the same conditions, but this time always lead it out in the right direction by means of a cord and harness. Repeat the experiment as often as time allows. The fowl will be as incapable of finding its own way out after the hundredth trial as it was at the beginning. All it has learned to do is to follow quietly. The leading process has been worthless for developing independent power.

No Progress in Riding the System.

The educational corollaries are interesting, especially from the standpoint of supervision. Even so foolish a thing as a hen can learn rapidly if the conditions for improvement are right. The subject, confronted by a situation that calls all its natural instincts into play can learn if permitted to build knowledge out of its own experience; it remains helpless to improve while somebody else pulls the string. It is hard for the teacher, and still harder for the supervisor, sometimes, to realize that there is no progress in intelligence when the people concerned are simply riding on the system. They take the thousand involuntary baths without a single step toward future cleanliness.

Growth in the intelligence of the learner necessitates that he shall have his head, so to speak, and exercise his own judgment in the face of a situation. He must even be allowed to go so far as to make a few mistakes, and feel the natural effect of those mistakes, before he can learn to use discrimination and intelligence. The mistakes, of course, do no good unless their effects are keenly felt. The negative is quite as important as the positive side of any situation.

Does this mean that the beginner needs to smash a few automobiles and break a bone or two before he learns to run a machine? Well, in many cases it does, and the pity is that it is so often done at the expense of the public. It is to be hoped, however, that the learner long ago found out something of the nature of collision on a small scale by early experiences in coasting, skating and the like, and so built up that stock of everyday experience which we call common sense. It does mean that the student will never learn to control the machine while somebody else insists on holding the wheel and keeping his foot on the power. The instructor may share the responsibility at the beginning of the lesson, to avoid unnecessary disaster, but his object is to withdraw as rapidly as possible, with the feeling that future progress is assured.

Three Fundamental Principles.

The efficient supervisor must be an efficient teacher of teachers. If we accept the poultry experiment as typical of instruction in general, and translate its precepts in terms of supervision, it means—

1. The supervisor must find a way to appeal to powerful incentives of the worker—the desire to make a good living; to stand well in the opinion of the community; to attain that larger freedom and self-expression that finds satisfaction in progress activity and accomplishment.
2. An immediate and certain connection between productive responses and keen satisfaction and between wasteful responses and corresponding annoyance.
3. A fair measure of liberty to prove and disprove, to hit upon superior methods of work, to benefit by natural mistakes, and where progress proves impossible, to transfer to lines for which the worker is better adapted.

Stated again in other words—the administration ought to place before its growing teachers unlimited possibilities in salary, in honor and gratitude of clients, in personal growth and enjoyment. But these rewards should be the prompt and consistent accompaniments of actual accomplishments, not favors distributed according to age, experience, years in preparation, personal patronage or any other condition which may, but frequently does not go with heavy production on the particular piece of edu-

cational work in question. Finally, provision must be made for the maximum development of intelligence and initiative, so that the workman is not only free to appropriate all the wisdom others have to offer, but what is quite as important, so far as his work is concerned, to apply others' ideas with the maximum of wisdom and discretion of his own.

Ambition and Home Talent.

The prompt and consistent application of these principles to the supervision of teachers is not always an easy thing to bring about. The first principle mentioned was the control of incentives, and here occasionally the supervisor finds progress apparently cut off by natural lack of ambition in the worker. Commonly it seems strangely lacking in the home boy or girl, sheltered all his life on the old homestead with father and mother, and never seeming to have felt the natural instinct of adolescence to cut the parental apron strings, and buck the world for himself. Such home talent frequently shows little feeling of personal responsibility, and so long as they can drift along easily and make both ends meet, would never branch out nor exert themselves for the best position ever offered. It is not safe, of course, to generalize about home talent. Local candidates often prove to be treasures, superior in every way to outside applicants, but there is a caution worth remembering. Outside candidates as a class are somewhat more likely to take their work more seriously, and to depend more upon themselves in emergencies than upon their friends' powers of outcry to save them. Persons who, for any reason, cannot or do not sever the home ties at the time of life when it is natural to do so, remain at a more infantile level of behavior, and look to others to furnish favors, as children do, without expecting to win them by strenuous exertion on their own account. Moreover, educational life, like any other kind, demands a certain amount of cross fertilization to produce healthy growth.

Another class that does not respond well to new incentives are those who have reached the biological limit of adjustment. It is hard to teach an old dog new tricks. All forms of life however parasitic and stationary as adults, begin their existence in a revel of activity. The young of the sponge, the coral, the oyster and even these and mosses are free moving at first. The human kind, especially in adolescence, show striking tendency to branch out, to venture, to aspire. But sooner or later, this driving energy is lost. Life settles down into the old ruts. The creature,—beast or human,—finally becomes about as lazy as he dares to be. Some reach this stage sooner, some later, but all of us get there by and by. Perhaps it is nothing to regret; certainly it is nothing to quarrel about. It just needs to be reckoned with, that is all; and in justice to the young men and women in the work, it is not fair to make them wait till their best days are over before they can collect the fruits of genius and industry, nor increase their salaries with age unless there is a real increase in earning power, as in many cases there undoubtedly will be.

Opposition to Merit Systems.

Fortunately the most general difficulties the administrator has to meet are not so hopeless as lack of aspiration. Million dollar longings frequently accompany thirty cent earning capacity. The trouble is not so much in finding sources of ambition and satisfaction as in connecting

them with accomplishments as teachers. It is the difficulty of establishing the merit system.

A part of the opposition comes from the teachers themselves. In Fall River, last year, teachers were asked to vote by secret ballot for or against the establishment of a merit system. It seemed probable that a good many teachers would welcome the opportunity to jump to a higher salary without having to wait years and take their increases by installments. The vote stood something like 28 for and several hundred against the merit system. The great majority preferred, apparently, to move along with the tide and get their benefits according to schedule, rather than have too close investigation as to what they were really doing, and being paid accordingly. The result seems to indicate that either teachers themselves do not think very highly of their showing, or else they fear that the methods of measuring their product fail to do them justice. Probably a good deal of both.

And in fairness it must be admitted that a teacher's work is hard to gauge by objective criteria. Written examinations are more or less arbitrary and uncertain. The standard tests rate merely the veriest dry bones of instruction, —the mechanics of reading, writing, arithmetic and the like. In a thousand important details of instruction and management—the attention of the physical welfare of children, cooperation with the home, study of individual needs and habits, attempts to make the instruction function in the present life of the children, the psychic influences brought to bear through the personality of the teacher, and so on—in all such matters teachers are at the mercy of the personal examiner, and his estimate may be hasty, narrow, biased, warped by personal antipathies and pet hobbies, and some of the most important factors may be lost sight of altogether. These objections can be overcome in some measure by the use of a score card worked out by teachers and supervisors in cooperation, combining their best judgment with that of others who have worked out similar cards, and so drawing up a well balanced set of specifications as to what good teaching should accomplish. Then if a final score is attempted only after a series of long, careful observations, interspersed with friendly, helpful consultations, there ought not to be hopeless disagreement as to the fairness of the outcome.

Prefer Own Pace.

There is strong reason to believe, however, that objections to the merit system are not in any large measure really due to matters of measurement, however clumsy, these may be, for we often find bitter objection to piece work among laborers on jobs where production can be very accurately measured. Not a few workers in many fields find it distressing to have their greed pitted against their laziness in such a way that they get only what they produce. In fact most of us find it pleasanter to take our own pace, collect the same rewards as our neighbors, and submit to no odious comparisons as to production. But this is a matter that cannot be left wholly to the majority vote of the workers. There are other parties in the case with interest at stake, particularly the general public. The interests of the general public as to efficiency in education demand a much greater emphasis upon actual accomplishment, even though it is much easier and pleasanter for all concerned to pay according to preparation, years in service, official rank or some other theoretical condition which is supposed to accompany increased usefulness, but which, as a matter of fact, may hide the grossest inefficiency. We would hardly expect the pullet to learn the legitimate pathway when the fence is full of holes. There should

be no short cuts to rewards except through actual service rendered.

Not only should we put a premium upon results by paying for them promptly and consistently; but we should pay for them far more generously. Salaries for educational work ought to be practically unlimited for the highest grades of ability. Let us urge our legislators to tax gifts and inheritances, movie tickets, soda checks, chewing gum, cosmetics and other useless luxuries till we have money enough to pay teachers in every part of the country all they can earn. Then if we give the small producers no more than they deserve, it will not be a crushing burden to pay the large producers all they can reasonably ask. And if the burden does seem heavy at times, we must recognize that the same pinch of sacrifice that falls to the lot of the average family in raising and educating its children, fall to the lot of the community as a whole if it is to do its full duty by the generation coming on.

Incompetents vs. Best Teachers.

Even in the poorer communities, while schedules remain comparatively low, there is a way for administrators to raise the rewards of service. Cooperate with the better towns to promote deserving teachers. If the town itself cannot put big monetary premiums upon efficiency, use the resources of other towns that can. In other words, instead of putting hindrances in the way of other towns hiring away the better teachers, encourage the practice. Advertise the work of exceptional teachers, and openly help them to find better places elsewhere, not only as a matter of honesty but as a good stroke of policy as well. There should be no blind alleys in any part of the system. If the administrator has had the services of a teacher whose work is worth more than he can afford to pay, let him rejoice in the extra service already rendered, and turn the loss to good account as an inspiration to the work of a successor. While this policy may hamper the work of the poorer system by rapid change of workers, this disadvantage is almost balanced by the number of "has-beens" that the wealthier district is obliged to wear out. Better a series of short administrations by live teachers than a long administration by a dead one.

How shall we penalize mistakes? Who is to be the judge of success, and how reconcile penalties with the sense of freedom that our third principle calls for? Clearly, if we are to reach any high degree of efficiency there must be well defined standards and objectives. Imposed wholly from without, they will tend to produce resentment and unrest. A certain brand of so-called "scientific management" has not been an unqualified success, for while it showed workers how to increase production remarkably, and gave them a fair share of the increased product, it left out of account a fundamental tendency in human nature to make experiments and

adopt improvements for oneself. But on the other hand if left optional from within, standards and objectives will degenerate into a self-satisfied parasitism that is not uncommon. Plainly the only answer lies in compromise and cooperation. As in the case of salesman and customer, both sides give up something but both should profit by the transaction. "What kind of product is demanded?" they will say. "How much are you furnishing, and how much is it worth at current prices?" A teacher ought not to have much trouble in realizing that, other things being equal, one who can get good results in special branches, playground supervision, or girl scout leadership, one who is willing to rebind books or take the school census, is worth more money than one who cannot discharge these duties. A supervisor ought to be able to see that everybody cannot do everything equally well and that much of the work will have to be done by persons who are relatively incompetent, at least in some particular, but no harm in that so long as he can pay accordingly. It is a matter for sharp but friendly bargaining.

No Short Cuts in Supervision.

There is no labor saving device for estimating just what kind of work a teacher is doing. Only the most painstaking study will enable a supervisor to speak with authority on any phase of a teacher's work. He cannot breeze in for a five minute visit and leave with any adequate conception of what is being accomplished. He should stay for a full recitation period at least, and then pass judgment only after thorough discussion with the teacher as to what has preceded and what is to follow. Adequate supervision necessitates visits much longer than are common, and much more time for discussion.

In the matter of penalizing mistakes, a good deal depends upon the individual. Here we need to get beneath the surface and reckon with certain facts of character analysis. The lusty, tough-minded extrovert cannot be handled in quite the same manner as the shrinking, tender-minded introvert. Proper treatment hinges upon the principle of compensation, which is fundamental in this connection. Persons are extrovert or introvert in proportion as they possess the power to push out and grow in the face of difficulties and opposition. Our Theodore Roosevelt is a pronounced example of extrovert—a weak stripling whose very handicaps caused him to become a paragon of manly vigor. History abounds with illustrations of phenomenal growth caused by "thorns in the flesh" of persons of over-compensated type—Mozart's, Beethoven's and Schumann's ear troubles, Demosthenes' impediment, Moses' heavy tongue, etc. A striking number of public speakers and singers suffer from speech defects. Some of the greatest war heroes prove to be individuals most sensitive to danger. Such persons are the manic, extrovert type whose discomforts and limitations rouse them to a greater struggle to throw off all obstacles.

The Introspective Type.

Extroverts are a joy to the supervisor. They are good sports and take their medicine manfully. There is no need of velvet gloves. With them, one can call a spade a spade, or worse. The under-compensated type are just the reverse. Their tendency is to shut themselves up in their strong tower when trouble threatens. They brood over slights and difficulties. They must be drawn out, kept out of sight of their failures, and fed on admiration and success. To treat them like lusty extroverts would be paralyzing. Their own supersensitive consciences furnish punishment enough as a rule. Pros-



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perity they need in unlimited measure. This does not mean that they should not be brought face to face with reality, or paid for something they do not do. It means that supervision is an art, and as such cannot be practiced by mere mechanical formula; it depends upon a very skillful insight and adaption as to individual peculiarities. Extroverts can be brought to battle with their own shortcomings, and get a world of good from the conflict; introverts would be unnerved by the same procedure. The skillful supervisor should be able to recognize and free to deal with both varieties.

A serious question in many systems is what to do with the few who do not seem to be able to respond to any reward and are unmoved by any forfeiture. There are probably fewer of this sort than is generally supposed, but a few there are who are utterly impossible. There should be no hesitation as to the proper course. Let them go as promptly as the law allows. If their work has been treated, not in the lump, as poor or very poor, but item by item, point by point—as register and other records, systematic program, progress in composition, presentation of reading, illustrative material in arithmetic, motivation in science, showing made on examination in music, courtesy of pupils, spirits, etc.—the unpromising candidate knows himself pretty well, and frequently the thought forces itself home, "Surely there is something in the world that I can do much better than I am teaching school; I will take it!" Thus they spare themselves a humiliation, and the administrator an unpleasant duty. Where this fortunate observation does not suggest itself spontaneously, it is the supervisor's duty to suggest it. If the director is in a position to offer work more in line with the worker's capacity, or can get some one outside the system to offer it, it is fortunate and gratifying to all concerned.

Tenure and Better Teaching.

The situation is somewhat complicated when the teacher feels that he has virtually a legal monopoly of the position through city or state tenure of office laws. The intention of such laws is good, but as in many other cases where legal restrictions are set up as a substitute for official good judgment, the remedy is worse than the disease. The matter is presented in a very competent way in Monroe's *Cyclopedia of Education* under the topic "Tenure of Teachers."

"Notwithstanding any advantages which life tenure may have, it is nevertheless a most undesirable one to adopt. No business could be conducted satisfactorily on such a basis of employment, and even with public employees under civil service rules there is always provision for the elimination of incompetents. In the work of teaching, where it is so easy to drop behind and die professionally, it is particularly important that the way be left open for the elimination of those who have ceased to grow, and who have lost their enthusiasm and their ideals. A teacher good at 25 or 30 may be comparatively useless at 45 or 50. In our desire to improve the conditions of tenure and to protect the worthy teacher, we may easily go to the opposite extreme and forget the interests of the child, for whom alone the school exists. The necessity of an annual reelection of all teachers ought to be removed, but the way ought always to be left open, without too much effort or too great burden of proof, for the dismissal of those whom the school officers deem no longer competent for the work of instruction. The permanent tenure plan does not afford much relief. It is practically impossible to dismiss teachers where a legal trial must be held and incompetency proved to the satisfaction of a court of law, and it is a matter of common knowledge that in places where life tenure exists both boards and

superintendents, after a time, cease to try to dismiss any one, and the efficiency of the schools declines. When charges are brought, it is altogether too often the case that it is the superintendent or principal, and not the teacher who is really put on trial, and almost any average lawyer can so shape the case that a supreme court will reverse the decision and reinstate the teacher.

"The life-tenure plan is objectionable, further, in that it tends to develop a self-satisfied and unprofessional body of teachers."

Rewards of Teaching.

Money is not the only important source of satisfaction under the control of the administrator. With many workers it is not the supreme source. They appreciate also the natural rewards of service, the comfort of doing a superior piece of work, the friendship and appreciation of parents and public spirited citizens, the honors of superiors, the emulation of fellow workers, and the like, and here is a field the enterprising supervisor will not fail to develop, especially when other incentives happen unfortunately to be beyond his control. The wise director will be alert to see that a teacher does not do a good piece of work without being made to feel a keen sense of pleasure in connection with it. Get a parent to go to see it; let another teacher visit and take notes; get a line about it into the papers or into the teachers' magazines. If necessary, run a local teachers' magazine for the purpose. Arrange for school displays in connection with fairs or any other exhibit that will admit them. A vacant store window is always available and serves admirably to advertise the products of especially good work. Parent-teacher and other associations give hearty cooperation in any movement to benefit the schools, and the evidence of their appreciation of special merit will be among the most cherished recompenses of exceptional work.

The American School Tax Problem

Some Uneconomic and Illogical Revenue Proposals

Article II

William George Bruce

If the question, whether the American schools shall continue to strive for higher standards of efficiency, is answered in the affirmative, then we must also concern ourselves with the problem of adequate support.

"There are those who wish the schools to be static while civilization goes ahead" says Frank B. Cooper, superintendent of the Seattle, Washington schools, "but the schools will not stand still. They are going forward with the times lighting more and more the way for greater intelligence, greater progress and greater power."

The American scheme of government not only demands a high order of efficiency in all the agencies that make for citizenship, but the progressive trend in all the activities upon the continent excludes the mediocre and indifferent. The affirmative spirit which actuates the people in all their aspirations should unquestionably find its best expression in the schools.

Thus, having answered in the affirmative the question whether high standards should be striven for and whether under existing conditions the American schools are entitled to more liberal support, it remains for us to ascertain whether the present devices for raising revenue are adequate.

The student of taxation who is apprised of the educational aspirations and needs of the land, and the methods employed in financing

them, will soon discover gross shortcomings and weaknesses. The fact that many school districts in the country are poverty stricken, or at least cannot secure the funds to maintain a system of education as efficient as the adjoining district, is ample proof of existing deficiencies in the tax laws which aim to provide for them.

The state exaction of taxes levied upon property values, and the distribution of the revenue based upon school population goes a long way to meet the inequalities between local taxable wealth and local school needs. But, experience has taught that it is quite difficult to adjust the distribution in such manner as to render sufficient support to one district and not provide unnecessary support for another.

The basic thought here must be that all tax units, founded upon property values, should at least provide the same pupil per capita support that the better situated districts are able to provide. In other words, the state support cannot consistently exempt from adequate local support those units that enjoy the possession of ample taxable wealth.

Equally basic is the thought that the poorest tax unit is entitled to an adequate, if not completely modern, school system. If the wealthier district, through increased local support desires to enjoy more elegant school structures and grounds, more elaborate appointment and

equipment, and add fads and frills to its curriculum, that is its own affair.

But, the aim after all must be that the children of all tax units, all school districts, rich or poor, are provided with a reasonably complete and efficient system of education and all that this implies.

This calls for an adjustment between local and state taxation which will do justice to all and favor none. Here the local tax ability of the one unit must be squared with the school needs of the other, and the distribution must arrive, as nearly as human intelligence and experience can compute, the requirements of all.

This brings into play two essential factors to be dealt with. First, the sources of revenue and the manner of their exaction; second, their expenditure, apportionment and distribution. The one precedes the other. Those who urge greater revenue should also come prepared to suggest where it is to come from. The educator must couple his judgment with that of the tax expert and advise legislators upon a course of action that will be clear, feasible and equitable.

Are Present Revenue Sources Adequate?

The testimony of the country is to the effect that the present tax measures exacted for the schools are inadequate, that the sources are strained to their utmost, and that new sources will have to be found.

What are the present sources? They consist in the main of realty property, or land, and the improvements, or buildings thereon, personal property tangible and intangible.

The tax experience of the world leads to the conviction that intangible personal property, consisting of credits, mortgages, stocks and bonds, cannot be equitably taxed.

To begin with this form of property cannot always be located, and if located and taxed means double taxation, and therefore a dishonest tax exaction. Credits of this character are usually based upon physical property which has already been taxed, and to tax both property and the evidence of property constitutes double taxation.

The taxation of tangible personal property is also attended with difficulties. Its location is subject to shift, to the market variations in values, and to some extent to seclusion. Absolute equity here can only be exerted where all such property is fully revealed and subject to uniform taxation. Those who escape inflict an added burden upon those who do not. No taxing device has as yet been invented which will reach personal property as a whole and subject it to an equitable and uniform tax tribute.

This throws the main burden of taxation upon real estate, and the buildings thereon, which cannot be hidden from the tax assessor. The theory here must be that the item of taxes is absorbed in maintenance cost and must be borne by the ultimate consumer, namely, the owner, the tenant, the lessee, the customer. In other words, the owners and users of land and buildings either bear the burden or shift the same upon industry, upon commerce, upon tenant—in brief upon the consumer.

The Illinois State Teachers' association after making a study of the subject of the present system of taxation declares that it is (1) theoretically unsound in aiming to tax all property alike, regardless of kind, whether natural resource, socially created or the product of labor, whether productive or unproductive, comfort or luxury; (2) historically found wanting because a relic of barbarism, tried and long since discarded by every important nation of Europe; (3) a failure in practice because most intangible personalty escapes; tangible personalty either escapes or is greatly underassessed, and most realty is put down for a fraction of what the law requires.

Can Present Sources Be Strained?

The question whether the present sources can be subjected to heavier strains has puzzled all those who have studied the same. It is proverbial that the taxpayer should oppose every increase, but it is also true that the average taxpayer pays his tribute silently and awaits the opportunity for effective protest. The opportunity is afforded at the polls when the issue of "turn out the rascals" has been raised.

The protest against the present high cost of school maintenance is in reality voiced only where a higher tax rate is in contemplation. School bond issues are, here and there, voted down as the result of a chronic conservatism, but a negative attitude on school support becomes significant when it means a protest against the cost of education.

The legislator, as well as the school administrator knows that the cost of education has been increased and that the burden of taxation has grown accordingly. But, when it comes to further increases in the tax burden he is largely governed by his constituency. The cry of economy is likely to render him conservative on all measures designed to increase the cost of government.

The present economic condition of the country is decidedly unpropitious for legislation which will look to the present tax sources for

larger revenues. The pressure under which thousands of school districts find themselves will undoubtedly compel remedial measures, but on the whole it is not likely that the legislators will readily consent to increased support for an extension of the present school activities.

The answer will be that present sources cannot be tapped for greater revenues. The present taxpayer cannot bear a heavier load. Find new sources of revenue if you can!

New Expedients for Revenue.

Now let us analyze for a moment a few of the expedients that are suggested for increased revenues. The first impulse is to devise methods whereby corporation, commonly called big business, are looked to for relief. It is generally believed that the corporation is an entity which pays taxes only out of profits, and thereby simply throws the burden upon the wealthy few, whereas the burden may in reality be upon industry or commerce and which is finally borne by the ultimate consumer.

The average mind is prone to think of those obviously best able to bear the burden without realizing where that burden is eventually shifted and who finally bears the same.

An eastern educator suggests that the poorer districts secure a larger revenue for the schools by imposing a sales tax upon all corporations and firms doing business in the respective districts. Here the well-intentioned educator and tax novice little realize that this tax will simply be added to the sale price of the articles so purchased by the people of that district, and thus simply add another tax upon themselves.

Another educator-tax expert proposes that a special tax on chewing gum and upon movie theatres be imposed in districts where the shortage in school revenue exists. This scheme is equally visionary inasmuch as it imposes a tax which must be borne by the local people and may even then, after the administrative cost is deducted, yield but a meagre revenue.

Expedients of this character are not only superficial and cumbersome in operation, but wholly uneconomic in results. The problem goes far deeper as we shall discover later in our discussion.

The Grab for Federal Support.

Another cult of educator-tax theorists entertains the idea of solving the problem through the aid of federal support. It is here argued that the schools are the concern of the state, that the nation is a federation of states and that, therefore the duty of supporting the schools logically falls upon the nation.

Again, the thought of falling back upon the larger unit for support, the unit that deals in billions, is promising and alluring. The great treasury building at Washington can stand a drain which the locality cannot. The millions that flow into that great treasury all come from a mysterious somewhere. Why not utilize them and thus ease our own burden?

The economic fallacy involved in this reasoning must be apparent to every thoughtful person. The nation secures its revenue from the people, the very people who now support local government and the local schools, and does not generate money through printing presses or hidden gold mines. The integrity of the American dollar is ample proof of the fact that the United States Treasury represents the legitimately earned money of the American people. No legerdemain or witchery creates the national tax revenue. It represents the product of American enterprise, energy and industry.

But, there is a far more serious principle involved in the proposal for national support. True, the schools are an institution of the state. It is equally true that the schools are a matter of local concern. It is because they are institutions of the state and the immediate pride and

concern of the citizenship, that we should hesitate when confronted with the proposition of national support.

National Support and Control.

National support is logically followed by national control. It means the centralization of the nation's school control, or else a dual system of federal and state support and control.

If the national treasury is drawn upon for funds the national government will also have a voice as to the manner of its expenditure. It will exact a course of study which may, or may not, fit local conditions. It will have a voice in the choice of instructors and the particular results they shall achieve. It will mean long distance school government as against local citizenship control.

It has long been recognized that the decentralized character of the administration of the nation's schools has had its distinctive advantages. It has stimulated the competitive impulse between state and state, city and city, village and village, and has rendered the schools the pride of the citizenship. High minded and patriotic men and women have devoted their time and effort liberally to school administrative labors in the consciousness that they were making a contribution to the stability and wellbeing of their country.

Dr. David Kinley, President of the University of Illinois, and an educator of note, recently said: "This onward sweep of federal power is breaking down our state authority. Are we to allow it to gain control over all the details of local affairs? The invasion by federal authority is admitted. Shall we permit it to extend to the new field of education or new methods which, to many, seem sinister in their future influence? Shall we accept the doctrine that we are destined to become a great continental democracy, governed in all important public activities from Washington, or shall we try to preserve the local autonomy in communities and states which is necessary to our liberties?"

Endangers Republic's Perpetuity.

Here is the voice of a layman. The Columbus, Ohio, Citizen, under date of November 22, 1921, says: "Why suppose that a federal system would be any better than the state systems? It is certain that it would be more uniform, but uniformity is not always excellence. Each state is now able to express its own genius in its educational system. It can take up new ideas. It can compete with its fellow states. Indiana, for instance, should soon see the evil effects of allowing its school system to remain in the hands of the cross-roads politicians known as township trustees, while Iowa may demonstrate the effects of making each school district a municipal corporation independent of county, town or city, with the power to levy taxes and contract debts, and with its officers elected at nonpartisan elections.

"To be sure, the advocates of a Federal Department of Education with a member of the cabinet now disclaim any intention of supplanting the local school authorities; but history shows us that once the general government assumes control of anything it does supplant local agencies. It dominates by its very magnitude."

"Once more tap the federal treasury under the guise of aiding the states, and once more to establish an army of bureaucrats in Washington, and another army of inspectors roaming at large throughout the land, will not only fail to accomplish any permanent improvement in the education of our people but will assist in effecting so great a revolution in our American form of government as one day to endanger its perpetuity," says President Nicholas Murray Butler, of Columbia University.

(Concluded on Page 129)

Graphic Aids in School Administration

E. L. Bowman, Recently Director of Vocational Education, Erie Pa.

Article II: Watchtowers in Charts — Conclusion

Areal Distribution.

A school executive sometimes has to refer to data showing distribution over the area of his city or district. Thus he may want to image the distance between schools, for studying the application of state laws regarding distance traveled in attending school. He may want to know the number and distribution of children of a given grade in a given area, as data necessary for a correct decision regarding establishment of a new school. He may desire a picture of the whole city to show the nearest centers for the different school activities, to which he may refer patrons requesting service. Thus, he may want to visualize the location of health stations, dispensaries, dental clinics, branch libraries, etc., with regard to the residence of a person calling for information. The executive may need to have a method of determining who and where are the agencies cooperating in his evening schools.

All these problems, and many more, may be solved by the use of map graphs or areal charts. Figures 8 and 9 are examples.

The first problem to be solved in attempting an areal chart is to determine what area is to be covered, and to what scale the map is to be drawn. Thus if location of isolated individuals or agencies is to be shown, the scale of the map need not be so large as when closely grouped locations must be plotted accurately. A county map at the usual scale will serve to show the location of the high schools in the county, because they are relatively distant from one another. On the other hand, to show the distribution of, say, sixth graders in a given area of a city, it might be necessary to use a map with a scale of two hundred feet to the inch so as to present accurately the location of each unit. In the East Side of New York even this scale would be woefully meager.

In almost every city there can be found a supply of inexpensive maps, sometimes given away by real estate companies as advertisements, as were those from which Figures 8 and 9 were made. The city engineer's office can al-

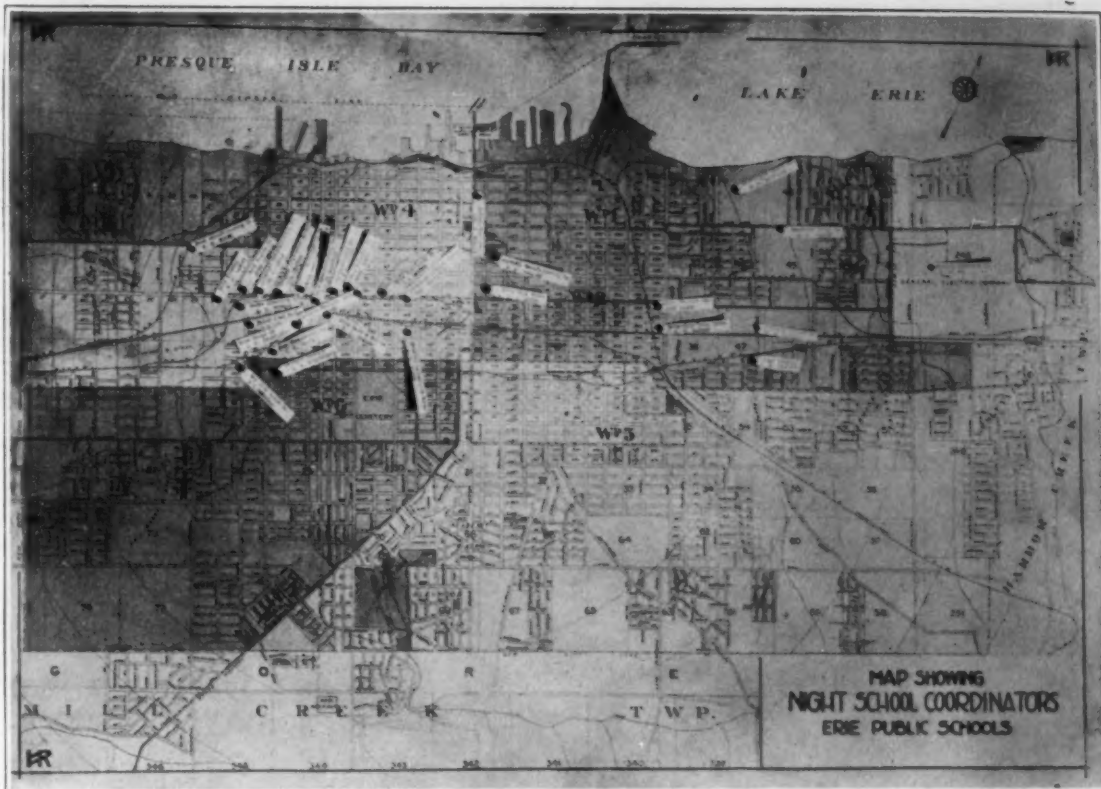


FIG. 8. A GRAPHIC RECORD OF LOCATION AND NAME OF PERSONS CO-OPERATING IN EVENING SCHOOL WORK FOR WORKERS IN FACTORIES.

ways supply blueprints of the city street map and stationers are usually ready to furnish printed or lithographed maps of city or district at reasonable rates. For county work, the United States Geological Survey maps will be found excellent, if the county lies in a mapped area. These maps show contours, drainage, and usually the location of every house.

Mounting the Map.

After we have secured the map, we must determine how the map is to be mounted. Here the use to which it is to be put will decide how we shall proceed. If the map is to be used as a circulating medium, is to be exhibited in many

places, as at parent-teacher associations and educational gatherings, it should be mounted on muslin to be rolled or folded. If the map is to be used for office use exclusively, it may be mounted on cardboard. If it is to be used for data which is changing from time to time it should be mounted on a surface that will admit of the use of map pins or tacks. For this purpose there is made a special material called map-board, which is composed of several layers of corrugated strawboard. This allows map tacks to be thrust in to the head and removed with the greatest ease.

Cork carpet, battleship linoleum, is perhaps the next most desirable substance. It must, however, be mounted on a stiff backboard for ease in transporting. If this is not available, wallboard may be used. Care should be taken to avoid compoboard, which is too hard, made up as it is of strips of wood glued between paper surfaces, and plasterboard, which crumbles and is unsatisfactory. Beaverboard and Cornell board have been used with success by the writer,

In mounting a map the beginner will experience much trouble unless he follows directions carefully. If he plans to mount his map on muslin, he should secure muslin of good quality, and should stretch the cloth tightly over a table or drawing board, fastening the muslin with small tacks outside the area on which the map is to be mounted. If the map is to be folded, the paper map must be cut into rectangles the size desired for the finished folded map. Lines should then be drawn in pencil on the stretched muslin locating the blocks, and allowing at least one eighth inch between the blocks for folding. The paper rectangles are then thoroughly soaked in water and coated on the back with library paste or other adhesive. With clean cloths they are carefully rubbed into contact with the muslin and weighted down until dry. The muslin is then trimmed around the outer edge and is ready for use.

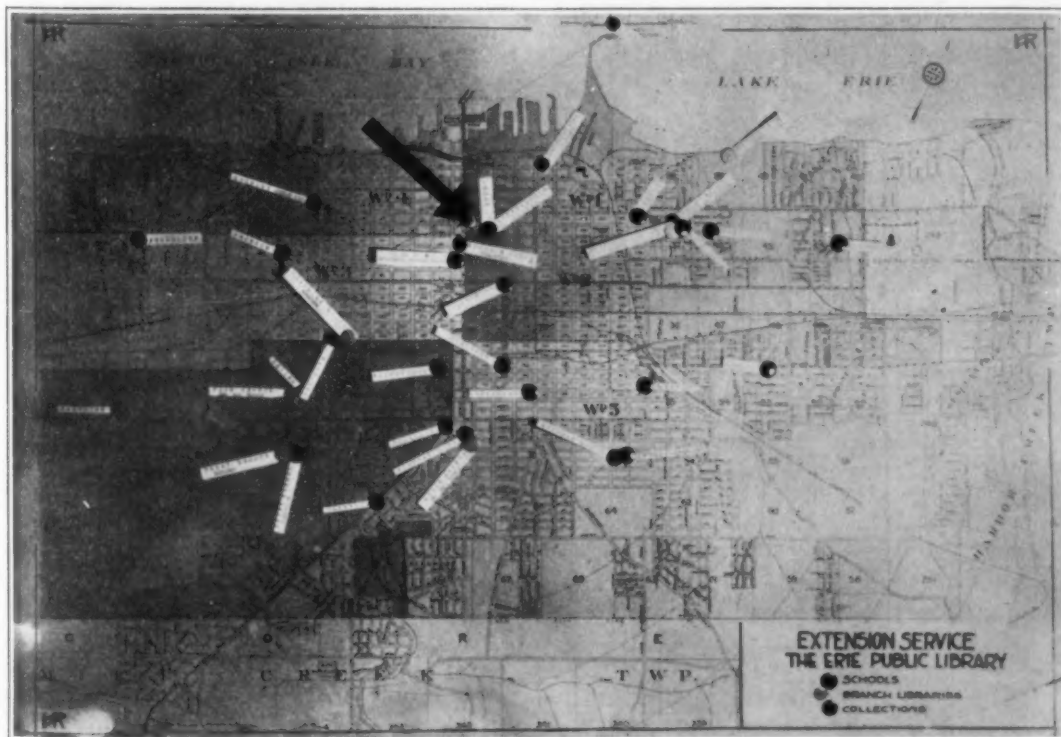


FIG. 9. WITH A MAP LIKE THIS IT IS POSSIBLE TO DIRECT ENQUIRERS TO THE BRANCH NEAREST THEM.

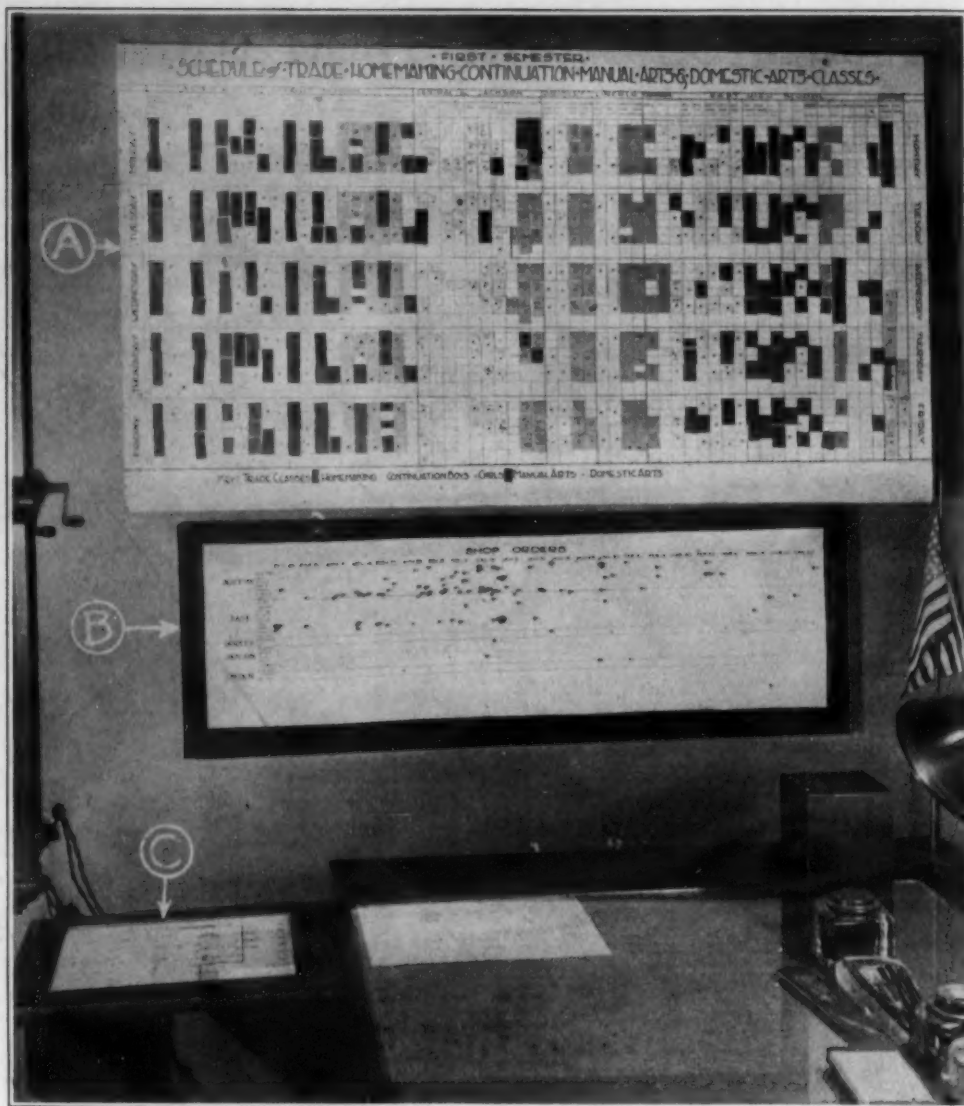


FIG. 10. HOW THE EXECUTIVE KEEPS ESSENTIALS AT HIS FINGER TIPS. NOTE A—THE SCHEDULE BOARD; B—SHOP ORDER PRODUCTION RECORD; C—PROGRAM OF WORK FOR THE MONTH.

If the map is to be mounted on muslin for rolling, or if it is to be mounted on board for office use, it is first thoroughly soaked with water. A tray is best for this purpose, but if none is available large enough for the map, the water may be applied in excess with a sponge. When the paper is thoroughly soaked and expanded to the full, adhesive is applied liberally to the back and the map is carefully rubbed into contact with the muslin or board, using clean white cloths and rubbing from the center to the outside. Weights are then applied until the map is dry.

If the map is to be mounted on board, the contraction of the drying paper will cause the board to bend toward the side on which the map has been glued. Accordingly, a piece of plain wrapping paper should be soaked and applied to the back of the cardboard or mounting board, at the same time that the map is glued to the face. The contractions thus balance themselves and the board remains straight.

In the organization of night schools, it is found advantageous to have for quick reference a map showing the distribution of the plants and factories where intensive campaigns for students have been carried on. Figure 1 shows such a map. In each of the indicated plants the management appointed a man or men, known as the "cooperators" who were kept thoroughly informed on the night schools, who distributed literature and received enrollments, and to whom reports of progress and certificates of completion were sent. To meet the need for graphic presentation, a map of the city was secured, and map tacks were inserted to show the location of each cooperating factory. The names of the cooperators were typewritten on slips of paper which were held down by the tacks. Thus instantly could be located the

factory and the man who was the agent of the night schools in that particular plant.

To visualize to the people of the city the scope of the extension service of the public library, a map of the city was studded with colored-head thumb tacks, the position of which showed the location of the branch, while the color indicated the type of service. Figure 9. Here a red tack denotes a school in which is placed an extension book collection. Branches of the Public Library open evenings or one day per week, are indicated by blue tacks, while industrial collections, branches in stores and social centers, are shown by green tacks.

Keeping Track of Teachers' Schedules.

One of the duties of an administrator is the control of the teaching schedule. The usual device to visualize the schedule is to rule a sheet of paper and write in the subject and the room occupied. This is satisfactory if there are but a few teachers or if there are no changes from the beginning of a term to the end. There is, however, much difficulty in making out such a schedule for the first time because change involves erasure in at least two places, often more

than two, and the writing in of data that has been transferred. Many an administrator using such a system has spent many an hour trying to check the errors in copying that crept into a program made in this old-fashioned way.

Instead of erasing and writing the data in a new place, it is much more convenient to write the facts on a bit of cardboard and move it about from place to place until a satisfactory schedule is made up for final adoption. When preparing for making the schedule, enough pieces of cardboard should be cut to allow each class which is to be scheduled to be represented by a single piece of cardboard. The pieces can then be labeled and kept carefully together in a box until all are ready. They are then placed on a form ruled to provide space for the program of each, and are moved about until all possible difficulties are eliminated.

The schedule board shown in figure 10 was made to show simultaneously the programs of all teachers of manual and domestic arts in the city. A piece of wallboard was prepared by being given a coat of show-card writer's white. When this was dry, a vertical column was ruled for each teacher under supervision. The division into schools was indicated by heavier dividing lines between the columns. Horizontal lines were then drawn to indicate the thirty hours (five days, six hours per day) in a week.

Next, a code of colors was devised to indicate the nature of the activities carried on by these teachers. Red was adopted to signify the Smith-Hughes trade education classes for boys. Yellow signified Smith-Hughes home-making classes for girls. Blue indicated Cox Act continuation classes for employed boys between fourteen and sixteen, while orange was used for continuation classes for girls between fourteen and sixteen. Lavender denoted manual-arts classes, and stone the domestic-arts classes in the junior and senior high schools. These colors are easily found in index bristol and showcard writers' cards. By the use of a photo-trimmer papercutter, a ten-cent sheet of cardboard may be cut up into enough strips or blocks for three or four programs.

As the requirements for each school come to the director's desk, blocks were made out for each kind of class, and were labeled with the name of the subject, the grade designation and the home room of the group. When the blocks for a school were all written, they were placed temporarily on the prepared schedule board. When all were thus placed, the board was scanned vertically and horizontally for conflicts. When found, these conflicts were removed by judicious shifting of classes until harmony was secured. When all was adjusted, the slips or blocks were fastened to the wall board with two ounce upholster tacks, making a neat and secure fastening. When it was found necessary to move a block, a screwdriver inserted under the block easily lifted the tack from place, while a tap from the end of the screwdriver handle settled the card in its new location.

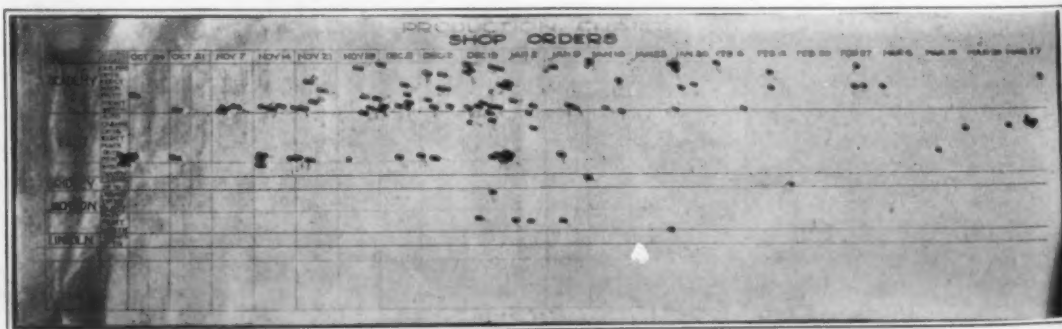
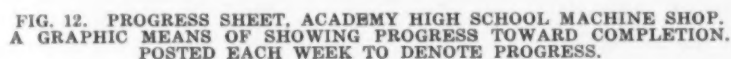


FIG. 11. AN EASILY OPERATED METHOD OF RECORDING DATES WHEN JOBS WILL BE COMPLETED.



It is possible by the use of this board to determine in a minute's time what classes under the supervision of this department are being held simultaneously in the different schools of the system, what classes a given teacher has on a given day, the number of vacant periods allotted to any teacher and when they occur and when, where and what courses are offered as electives for the continuation students. Per-

Records of Progress toward Completion.

When new equipment is being installed or new buildings erected there is always the desire to know what part is completed and when the new facilities will be ready for use. It is not always convenient to visit the work every time one desires to visualize its progress to-

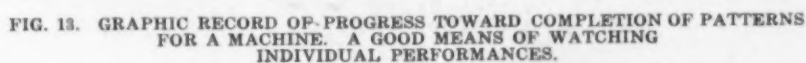


Figure 10 shows, just below the schedule board, a shop-order record which answers the question as to when a given product of the school shops will be delivered. This is made of a blueprint with a horizontal line for each productive shop in the system, and vertical spaces denoting the days of the week, one for each day in the school year. The print is of blue lines on a white ground, and is made from a tracing by first making a brown Vandyke print on thin paper and then by the use of this print as a negative, the blue line prints are made. The final print is mounted on a sheet of wall board for convenient handling but might be mounted on cork carpet or on map-board.

As each shop order goes out, the instructor responsible for its execution notifies the office of the probable date of its completion. The director's secretary then inserts the stem of a map tack through the end of a small oblong of paper on which is typed the number of the shop order, and inserts the point of the tack in the square on the shop-order board. The position of the tack indicates the shop where the work is done and the day on which delivery is promised. As the job nears completion, the instructor keeps the office informed of the status

(Continued on Page 129)

Can America Learn from British Schools?

Dora V. Smith, Instructor in English, University High School, University of Minnesota

In the mind of the average American, and especially among those of British descent, there is a peculiar halo about the head of a British educator and a glamor of perfection about his school, which is the envy of too many of the conscientious among us. It is time, it seems to me, that we investigated the matter and assumed that pride in our own institutions of learning which we have every right to maintain, and which undoubtedly is warranted by the facts.

With this problem in mind it was with no little interest and curiosity that I set out to spend the school year 1920-21, on leave of absence from the University High School of the University of Minnesota, among the schools of Great Britain. It was my privilege to visit representative schools in Scotland and to discuss problems with educators there. In London, after two months of visiting about schools of various types, I entered upon seven months of teaching in a private girls' college of some reputation for scholarship, and at the same time attended educational lectures and meetings held in the metropolis during the winter.

My acquaintance with British Schools began with a visit to Scotland, whose schools are distinguished from those of England in both democracy of spirit and thoroughness of practice. Scotland is still firmly intrenched in the old traditions of learning and the formal discipline to be derived from the study of the classics, but what she teaches, she teaches with a vigor and a thoroughness, approached by few schools anywhere.

Teaching More Hebrew Than English.

St. Andrew's University, for instance, teaches more Hebrew than English, and her modern history course ends with 1789, the year in which the French Revolution began an interesting indication as to the age of material adjudged suitable for academic consideration.

This quaint little college of 650 students, with its four buildings of mellowed yellow stone surrounding a charming little quadrangle in the center of which stands the old thorn-apple tree of Queen Mary herself, lies under the shadow of the ruins of the old Celtic monastery, where legend has it St. Andrew first established the Christian faith in the early days of its history, a most delightful place in which to bury oneself amidst the learning of the ages and forget there is a twentieth century or a problem of disarmament to trouble the minds of men.

But across the Tay in Dundee, a more modern branch of the University is establishing itself, connected with which is a splendid new institute for the training of teachers. Quite American, it is supposed to be, with a Women's Smoke Room, an American classroom with blackboards around three sides of it, and an American drinking fountain, which is the object of much curiosity on the part of both students and faculty.

As to the first, I did my best to persuade my guides that America had no claim to it, and as to the second, I realized its uniqueness only after my experiences teaching in London, where I was accorded the usual two-foot blackboard perched on an easel in the front of the room, for the use of the teacher only. The third is American indeed, for the average school or public playground in Great Britain still boasts the public drinking cup so long tabooed in this country.

How They Study Shakespeare.

In Scotland it was my privilege to visit the English classes in some of the best secondary schools, every one of which was engaged in the study of Shakespeare, whose works furnish the subject matter of four-fifths of the course. I choose an example from the work of a man reputed to be one of the best English teachers in the country. His class was studying "Hamlet" at the rate of three pages a day, regardless of division into acts and scenes.

The discussion began in the middle of line 105, Act 1, where it had been concluded the day before. Each member of the class read six lines in turn, after which the master (for all teachers are Masters and Mistresses in Great Britain) reread the passage, commenting upon the history or meaning of the difficult words, which the class had presumably prepared before hand, but he desired to save time by giving the information himself. The procedure was this:

Teacher: Now the ghost enters. Shakespeare here makes use of super—

Class draws out: STITION.

Teacher: Now he says, "I'll cross it!" Shakespeare uses that word in what other play? (As the class did not know, he told them, "Macbeth.") There Macbeth says he is crossed, meaning he is contra—

Class: DICTED.

So the class proceeded for a full forty minutes, after which the teacher assigned the next three pages in advance for the corresponding day of the following week. But one is not surprised at such a procedure when he learns the type of examination for which the students are being prepared. Question I of a sample examination is, "Who says each of the following lines?" (ten single lines chosen at random from the play, regardless of meaning or importance.) Question II, "Quote the reply given to each of the preceding lines and tell who said it."

Independent Thinking Excluded.

It is easily seen from this where Scotland gets her reputation for thoroughness in education. No American student could pass such an examination, but we must remember also that the chances are a Scotch student could not pass an American examination on the same subject. Scotland is teaching the literature of the college entrance examination while we are attempting to teach literature for the more vital purposes of life.

Independent thinking is excluded from her process of instruction as well as from the demands which she makes upon her students. To her, memory work is all sufficient. She has never heard of dramatization in the classroom and would taboo the mere mention of it for two reasons: it gives no place for formal discipline, her old stand-by, and it represents a bowing to the interests and capacities of children, which is against her Calvinistic principles.

If there is an easy and a hard way of doing a thing, an interesting and an uninteresting one, she must choose the latter, for that is how character is built. My suggestion of Oral English was met by the objection that in Scotland children are to be seen and not heard, and that the school which teaches a child to have and express an opinion will have to reckon with his parents.

All promotion is based upon the passing of examinations, certificates from which take the place of High School Diplomas, except that a much smaller proportion of children reach the desired end. Since, at the conclusion of a course of years, the child must pass an exam-

ination in every classic he has studied, the work is extended so far as possible throughout the year, so that the drama, begun in August, is made to last, so far as possible, until the following June, alternating on various days of the week with other classics being pieced out in a similar manner. It is not surprising that both teacher and student become inexpressibly bored before the end is reached.

Grammar is Scotland's Pride.

But the pride of Scotland is her teaching of grammar, and of its results she has certainly a right to be proud. I have seen more knowledge of grammar displayed by children in Scotland seven and eight years old, than I have seen in many a high school English class in this country. Not only that, but these tiny tots spell the words they are using, analysis, predicate, and so forth, as glibly as ours spell dog or cat.

But the price the children pay for such knowledge is enormous. Handwork, games, nature study, all those additions to the old curriculum are absent from their program, and none of those natural reactions to environment and the enjoyment of it which form so large a part of the work and play of our primary schools belongs to the daily experience of the children of Scotland.

I have seen babies four years old, whose little heads scarcely reached above the high tables at which they were sitting, scratching out in painstaking characters in pen and ink the sentence of the copyboard, "Winter is here," while the Head Mistress with whom I visited the school encouraged their efforts with, "That's right, children, work hard!"—a commendable piece of advice under certain circumstances, but somewhat dwarfing both physically and mentally when applied with so much vigor to the tiny four-year-olds in question.

But the children of England have no more knowledge of grammar than their American cousins, and many of them brought up on the paraphrasing of Macaulay before they can write sentences of their own, become so hopelessly involved in the expression of their thoughts that they put in a period, or worse yet a comma, and start all over again. Among the older students, however, some survive the process with a flow of language and a more or less literary style, totally lacking in many of our students.

Cruel Social Distinctions.

To an American the most noticeable characteristic of English education is its class distinctions. The terms elementary and secondary denote a social distinction only, for both types of schools accept students at about the age of four and carry them through to the age of thirteen or fourteen in the elementary schools, and fifteen or sixteen in the secondary, whose purpose is partly college preparatory.

The elementary are the free schools of England, and the secondary the private or higher class schools in which large fees are charged. For that reason no one who could possibly help it would send his child to an elementary school, not even the officials themselves, for they are looked upon as charity institutions, survivals of the old parochial schools which, like the charity soup over which Irving's newly rich citizen smacked his lips, are "good enough for the poor."

I found large numbers of these schools dark, insanitary, and cold, the thermometer registering 45 degrees most of the winter, and almost totally lacking in equipment. Naturally no

teacher who can possibly secure a position elsewhere will teach in the free schools, and the result is that many of the teachers obtained are comparatively uneducated, slovenly in appearance, and utterly lacking in professional ideals of any kind.

And there is nothing to stimulate them toward anything better, for a teacher in a free school is barred from membership in the National Educational Association of England, a cruel social distinction, and an injustice to many a conscientious man or woman trying to better himself and the school which he represents.

Furthermore, we must remember that 80 per cent of the future citizens of England are in these schools. We who have gained our knowledge of English schools from charming stories of delightful young girls and irresistible youths produced by the time-honored Public Schools of England, (public in the sense of Eton and Harrow) fail to grasp in any way the real educational problems of the country, which is represented by the education of her common people in the free schools.

It is an inevitable result of the course of study provided, that the English gentlemen of the upper classes, products of these other and finer institutions, are equally ignorant of the problem and have little sympathy for the complaints of their less fortunate brothers. Because the upper ten or twenty per cent have been so privileged, the great masses have suffered in proportion.

The Privileged School Children.

These secondary schools which have so often attracted our attention are still there, meeting the traditional educational needs of the young people of the better classes, and delightful schools they are in many respects.

I recall one in particular, in London, in which I spent a most interesting day. The buildings were light and airy, and most beautifully appointed like a splendid modern home. Copies of the world's famous paintings lined the walls, and statues of Greece and Rome stood here and there among the furnishings to give the necessary atmosphere for the delightful old classical education going on within its walls. English grammar was taught by the Latin teacher with Latin terminology as preparation for the Latin to come, and no doubt the girls leaving the school at the age of seventeen knew as much Latin and more Greek than many a sophomore

in our universities. In English, too, they approximated at least the Freshman course at an American university.

But the cheapest fee in the kindergarten class was \$60 a year, advancing rapidly with the progress of the student, a very good indication of the percentage of English girls to whom such privileges are open. The traditional attention to those qualities which go into the making of every lady of gentle birth was most interesting to see. On entering the classroom, the girls stood beside their desks until the teacher and I took our places, whereupon teacher and pupils exchanged good mornings and all sat down together.

At the close of the lesson, the girls stood once more and waited until both teacher and visitor had left the room, when they proceeded to their next lesson. As to the extent to which the type of curriculum meets or fails to meet the needs of the girls not going on to the universities much might be said; but education for real life needs, while frequently discussed in theory, finds little vogue in practice in schools of this kind.

Limiting Knowledge.

For instance, a class of girls whom I was preparing for advanced positions in the Civil Service, Post Office positions and the like, were preparing for examination in the following subjects set by the London County Council: Spenser's "Faerie Queen," Shakespeare's "Coriolanus" and Bacon's "Essays," taught in Oxford style with much stress upon text and notes and little upon story or character portrayal.

It is obvious that when a higher standard of examination was required for the selection of a superior type of candidate, the examiners went for their examination material to the standard Intermediate Art Examinations of the universities without any reference whatever to the practical needs of applicants involved.

There is much I might say with regard to the capacities of the English students with whom I came in contact as compared with the capacities of our own, but space will not permit. Suffice it to say that in most instances I could assign only about one third of the work which I do in America. While the girls have a fair ability in the memorizing of facts, they lack to a very marked degree the power to grasp an idea and trace it to its ultimate consequences or

associate it in any way with other facts of a similar nature. They know that Magna Charta was signed in 1215, but as to the meaning of that event in the future of their country, they have little conception. In fact, they do not expect to have ideas of their own upon such subjects, for personal opinions approach perilously near to impertinence in the eyes of their teachers. Any attempt on my part to relate past with present events was usually met with the half-injured protest: "Please, Miss Smith, on what page in the history book does that come?" The recognized procedure in the history class was to begin with a ten point quiz in which one word or date answers were required and then lecture for the rest of the hour. In fact, I was warned by a superior officer that the recitation method was always objectionable as one could never expect the rest of the class to attend while one of their number was reciting. Discussion was almost unknown among my students, and when entered into, brought out some interesting ideas stored away in their minds; for instance, on the subject of Free Education, "If you give the same education to the son of a poor man as you do to the son of a rich man, first thing you know he'll think he's as good as he is!" Again, on the subject of Free Trade: "Of course Free Trade's a good thing for a country, or else England wouldn't have it!" The girls' acceptance of the latter doctrine on any subject whatsoever is interesting indeed, for there is no doubt England is adept at teaching patriotism in her schools.

The students' devotion to things English is remarkable, but their knowledge of the rest of the world, even of their European neighbors, is most strikingly limited. For one thing, books are expensive and library facilities woefully limited; most of the girls in my classes were prohibited by their parents from using the meager resources of the public libraries now struggling into existence, for fear of their acquiring some loathsome disease from books which were the common property of both rich and poor.

These are but a few of the conditions with which I met in my year among British schools. Have they anything of vital importance to contribute to American education? The preceding facts would seem to have answered that question.

Suggestion for a Code of Professional Ethics for Superintendents and School Board Members

Inspector J. B. Edmonson, University of Michigan

A Michigan superintendent recently declared, "If superintendents and school board members did not so frequently violate the spirit as well as the letter of certain accepted standards of professional ethics, it would not be necessary to urge the rank and file of the teachers to improve their conduct in certain respects." I find myself in agreement with this superintendent. In fact, I have discovered in my work as inspector of schools for the University of Michigan that certain superintendents and school board members do not set a very good example for their teachers in matters of professional ethics. I believe that I can illustrate my opinion in this matter by citing a certain number of actual cases.

Case 1. In the city of * * *, Michigan, a well known member of the board of education follows the very questionable practice of

calling on the new teachers to present the question of additional insurance with the company that he represents. I am informed that it is considered a "good investment in local support" to take a policy.

Case 2. In the town of * * *, Michigan, the present superintendent of schools is likely to be seriously embarrassed at the close of the year should he refuse to grant the son of Mr. B, a member of the board of education, a privilege in the matter of college recommendation that would not be accorded to other pupils of like ability.

Case 3. In the village of * * *, Michigan, the members of the board of education determined the selection of teachers this year at a meeting to which the superintendent of schools was not invited. In fact, the superintendent found it necessary to wait until the village

newspaper appeared in order to know the names of his associates for the next year.

Forced the Superintendents Out.

Case 4. In the village of * * *, Michigan, the board of education employed as the principal of the high school, a rival of the superintendent of schools with the end in view of embarrassing the superintendent and encouraging his early resignation.

Case 5. In the town of * * *, Michigan the superintendent ordered a high school teacher to resign at Thanksgiving time without any previous warning and without any apparent reason other than the desire to give the position to another available teacher.

Case 6. In the town of * * *, Michigan, a new superintendent was elected in the spring of 1921. This superintendent-elect paid a visit to the schools at a later date without

making his presence known to the retiring superintendent. He succeeded in doing this by representing himself as the representative of a book company. He also sought information concerning the school by writing letters to the teachers and not to the retiring superintendent. In the town in question the superintendent was leaving of his own volition and had only the kindest feelings toward his successor.

Case 7. In the city of * * *, Michigan, the superintendent appears to seek to prevent his more successful teachers from securing knowledge of opportunities for advancement elsewhere.

Case 8. In the town of * * *, Michigan, the members of the Board of Education appear to be very careful to secure the appointment of members of their immediate families to certain of the more desirable teaching positions in the school.

Helping Out Weak Teachers.

Case 9. In the town of * * *, Michigan, the superintendent makes it a practice to give weak teachers the benefit of every doubt when in correspondence with other superintendents, especially those in neighboring states. In this way the unsatisfactory teachers are passed on to other communities with the least amount of friction and unpleasantness for the local superintendent.

Case 10. In the village of * * *, Michigan, the retiring superintendent in June 1920 was very careful to destroy all papers, records and reports other than records of scholarship that might help the superintendent-elect in organizing the work for the new year.

Case 11. In the town of * * *, Michigan, the superintendent gives a "surprise party" at the end of the school year by announcing decisions of the board of education in matters of appointments and salaries that are quite contrary to opinions and encouragements expressed during the year.

Case 12. In the town of * * *, Michigan, the superintendent in his desire to secure a better position for 1922-23 prepared and issued to a group of 25 schools a letter concerning his preparation, ability, and his desire to be considered as a candidate. In many of the 25 schools the board of education had not considered the question of selecting a new superintendent.

It would not be difficult for me to continue to cite cases ad infinitum. However, the twelve cases will serve to call attention to the kind of questionable procedure that takes place too frequently in some of our school systems.

Not Peculiar to Michigan.

It may be that some of the readers of this article may conclude that Michigan school authorities are a very "sinful lot", but such readers are advised to look around before making such a decision. It is my best guess that other states can furnish a goodly number of cases of questionable practice similar to those selected from Michigan. In fact, I have learned of a few situations in other states that make the Michigan cases seem of slight importance.

During the past few years I have been gathering suggestions for a code of professional ethics for school authorities. Much of my material has come from the students of my classes in school administration and from the contributions of those in charge of schools inspected by me. From various sources I have gathered the following fifteen items for such a code:

1. It is unprofessional for a superintendent or school board member to seek by personal solicitation to sell to an employe in the school any commodity or service such as real estate, life insurance, or professional service.

2. It is unprofessional for a school board member to assume the authority without previous instructions by the board to forecast possible decisions of the board in such matters as the offering of a position to a candidate, the asking of the resignation of a teacher, or the promising of a contract to a firm, etc.

3. It is unprofessional for a school board member to seek to secure a position in schools for a member of his immediate family.

4. It is unprofessional for a school board member to criticize publicly teachers employed in the schools, but it is the duty of the school board member to bring such criticisms to the attention of the superintendent and supervisory staff.

5. It is unprofessional for a school board member to ask such privileges for his children or employes as would not be granted to the children or employes of other patrons of the school.

Teachers' Contracts.

6. It is unprofessional for a superintendent to lend encouragement to a teacher in breaking a contract with the school authorities in some other school system.

7. A superintendent or other school officer should not offer a position to a teacher under contract without first determining the willingness of the teacher's employer to grant a release.

8. It is unprofessional for the superintendent to encourage teachers to consult with him concerning matters which are clearly within the province of a supervisor or a principal.

9. It is unprofessional for the superintendent to be other than frank with a teacher in matters pertaining to her work and tenure.

10. It is unprofessional for one superintendent to make any misrepresentations regarding a teacher when he is acting as a reference for a teacher.

11. It is unprofessional for a superintendent or any school authority to receive money for

aid or services rendered to teachers in securing higher and better positions.

12. It is unprofessional for a superintendent to visit with a view to employment, a teacher at work without the knowledge of his or her superintendent.

13. It is unprofessional for school board members to seek to perform the duties of the superintendent in the selection of teachers, the supervision of teachers, the selection of textbooks, and promotion of students, etc. etc.

14. It is unprofessional for a superintendent-elect to inspect the work of a school system without the knowledge, and if possible, the consent of the retiring superintendent.

15. It is unprofessional for a retiring superintendent to refuse to organize and leave his successor such information, data, and facts as are needed for the opening of the school year without loss or delay.

It is true that these fifteen items do not cover the whole problem of professional ethics. However, I am presenting them with the end in view of getting the problem before those interested in creating standards of professional practice. It may interest the readers of the SCHOOL BOARD JOURNAL to know that the committee on professional ethics of the Michigan State Teachers' Association is planning to give attention to this problem during the present year. As a member of that committee I am planning to submit the preceding fifteen items to the committee with the recommendation that the same be issued to a limited number of school authorities for comment and criticism. It may be that the result of this comment and criticism will bring about the elimination or at least the restatement of many of the above items. I am, however, confident that the discussion of the problems involved in the fifteen items will serve to clarify the thinking of school authorities on certain fundamental questions of relationships and responsibilities.

The School Census

L. D. Morgan, Hampshire, Illinois

School administrators in the past have greatly underestimated the value of the school census in the administration of their schools. This has been shown by the various and oftentimes inefficient ways in which it has been taken, and by the neglect to organize and use the data after it has been collected.

In planning to take a school census, the following questions present themselves as being of great importance: (1) How should the school census be taken? (2) When should the census be taken? (3) What should the census contain? How can a continuous school census plan be devised? (5) What uses can be made of the data collected?

There are many plans in vogue for taking the school census, but the following ways seem to be the most common: (1) the board of education hires a regular census taker; (2) It is taken by the teacher; (3) It is taken by the teacher with the assistance of their pupils; (4) It is taken by members of the local women's clubs.

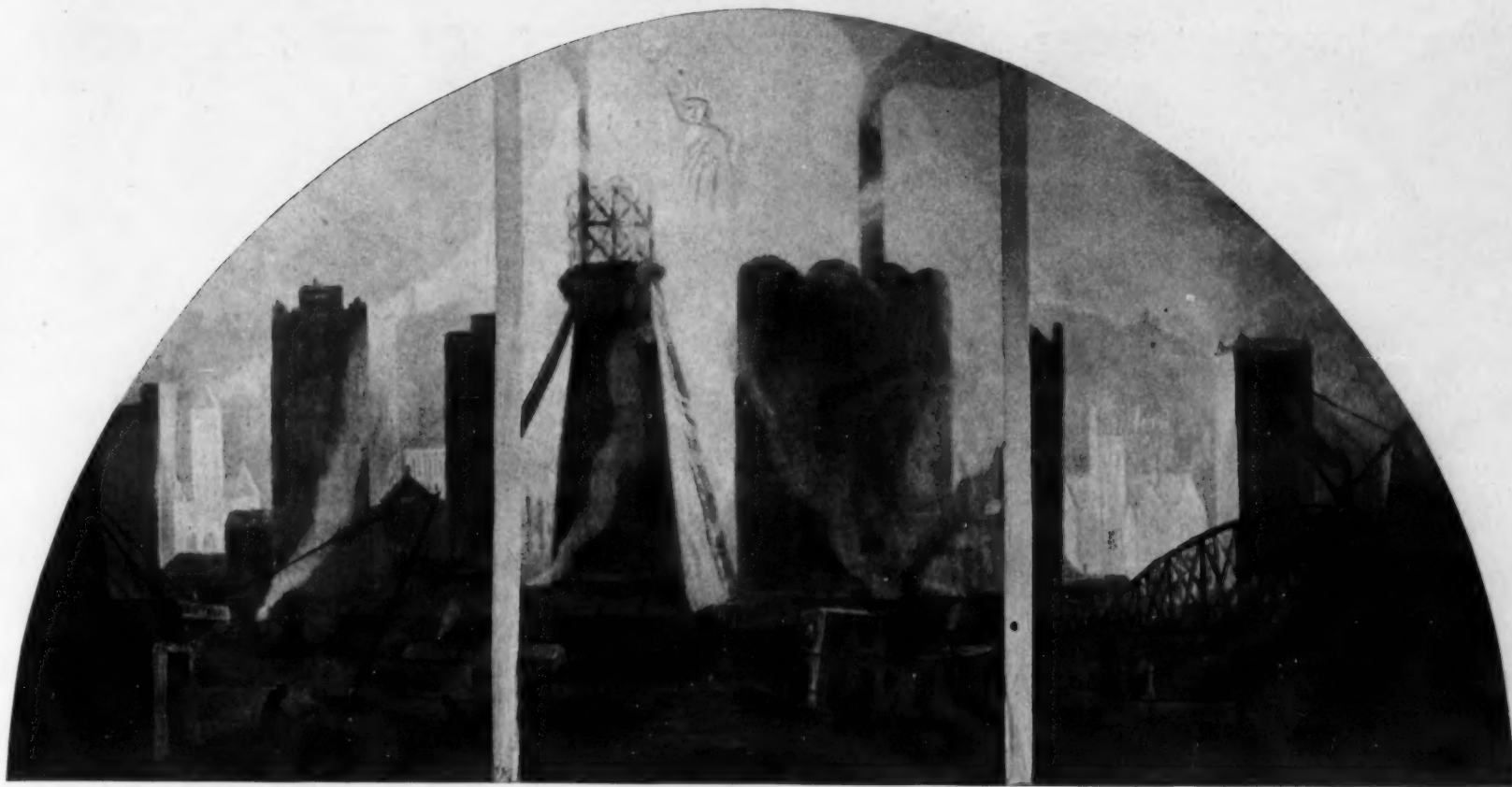
Where the census is taken by the first method referred to above, it is likely to be inefficient, unless a person trained for the work can be secured. In the majority of cases the census taker sees no need of being particular in getting the exact ages of children, and other information of prime importance to the school administrator. On the other hand if the school district is small the cost seems too large to warrant a yearly expenditure for such a purpose.

By taking the school census by plan No. 2, the school may be dismissed for a half day, and the school district having been divided into sections, each teacher is given a particular section. So far as it is practical, the teacher should take the section from which the majority of her pupils come. In taking the school census in this way the cost is small and the teachers become better acquainted with the parents and the home life of their pupils, as the teachers know better than the ordinary census taker what information is wanted, and they will be more particular in seeing that the information secured is exact.

Where the school census is taken by method No. 3, the school is also dismissed for a half day and the district divided as in No. 2. Instead of the teachers alone doing the work, the teachers use their pupils as interpreters and guides for the sections in which the pupils live. This method is without doubt the most efficient and serviceable of the methods given. By this method the school and home are brought into closer contact, and the parents are brought to realize what the school is endeavoring to accomplish.

When the school census is taken by the last method, the correctness of the data secured depends upon the calibre and sincerity of the ladies selected to do the work. If a lady is given only the block on which she lives, the information secured is very likely accurate. But there are many blocks in cities in which no

(Continued on Page 87)



THE SPIRIT OF LIBERTY.

A GIFT TO THE FIFTH AVE. HIGH SCHOOL OF PITTSBURGH BY THE ARTIST—JAMES BONAR.

Introducing Art into the Public School Buildings

A Plan Operating in Pittsburgh

John L. Porter

The reason so many people do not appreciate Art in its various phases, is because they have never had the taste for it created until late in life, and it appeals to them then, only because of exceptional beauty in color, or because of peculiarity in design.

Nine-tenths of the viewers of art work know nothing whatever of the value of drawing, the mixing of color, the composition of a painting, or a sculptural group, the design of a building or monument; the intricacies of landscaping, the subtleness of decoration, the difficulties of carving, the patience of needlework and fabric manufacture; the ingenuity of pottery and glass making, and the hundred and one other quantities which must be either inherent or an adjunct to perfection in art production.

Add to the above the barrenness of the usual schoolhouse, and you will have some of the reasons why the public schools of the City of Pittsburgh were made the medium for establishing a new form of art appreciation and education.

And it came about in this way:

In 1916, the writer, invited 99 of his friends to join him in a voluntary organization, agreeing to donate ten dollars each, annually for a period of five years, to establish an annual fund of one thousand dollars which could be used in purchasing paintings from the exhibition of the Associated Artists of Pittsburgh.

This latter organization was made up of all our really interested, diligent and determined painters, sculptors, etchers, illustrators and book-crafters. Up to 1915 the members had no other incentive than the satisfaction of accomplishment. The local public attested its appreciation of their local effort, by a desultory interest in the annual exhibit of the association, but did not seem to realize that the purchasing of these pictures, etc., was the kind of encouragement necessary for the maintenance of an art colony.

Such a radical movement as that proposed by the writer, naturally, met with all kinds of discouragements. These ranged all the way from inattention on the part of the indifferent to flat refusals on the part of the man who never gives anything, without its being accompanied by a blare of trumpets, and the man who thinks he is already paying too much as school taxes, and looks upon such a contribution as an addition to his penalty for living and having taxable property.

After canvassing five hundred of his friends several times and securing only eighty subscribers, it looked as though the plan must be abandoned, but when that became known, two good

friends, Mr. James Bonar and Mr. W. Linford Smith, collaborated by soliciting their friends, until the required one hundred contributors were listed.

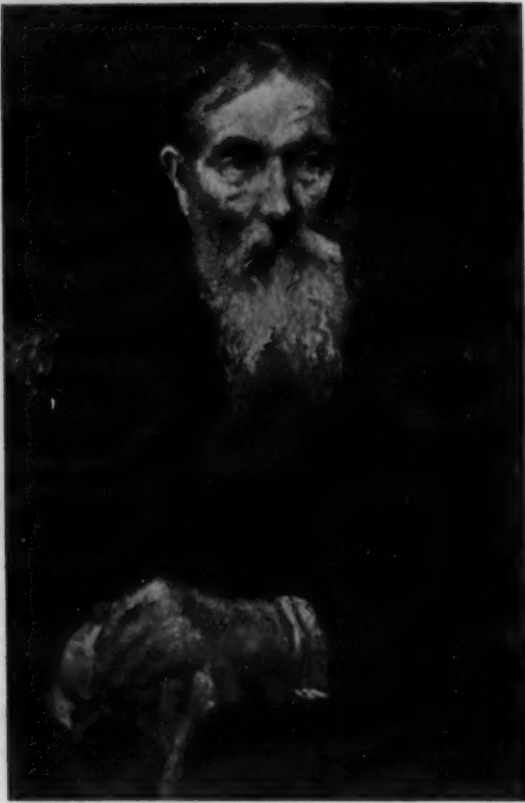
Our plan, when completed, had for its primary objects—the creation of an incentive among the local artists for better work; the increasing of the art association membership; the betterment of the annual exhibit; the opportunity of selling the artists' works; and finally of having them placed in desirable and more or less permanent show places.

Thus far, our plan seemed to cover the delinquencies of the local situation, and our next problem was: What disposition shall we make of the pictures, etc., after they come into our possession? And then the founder conceived the idea of presenting the pictures to the public schools, in the belief that if the children during the most impressionable period of their lives could be induced to show some interest in good pictures, they would carry away impressions which would soon begin to show in their home surroundings, and eventually, throughout the entire neighborhood. For if there is anything which even a moderately artistic temperament abhors, it is dirt, squalor, gloomy living quarters, rubbish and filthy back-yards.

When the plan of donating our annual purchases was laid before the school authorities, it was cordially concurred in by the director of art and recommended for consideration to the superintendent of schools. Mr. Davidson gave the suggestion his unqualified endorsement and presented the matter to our board of education. The members of the board first evidenced a genuine surprise that any person or body of persons should undertake to give *anything* to the schools, and particularly something which promises some day to be not only an asset to the schools from the standpoint of actual intrinsic value, but a matter of great civic pride as well. Their



GEORGIA.
BY G. F. ACKERSON.
PRESENTED IN 1920 TO THE PITTSBURGH SCHOOLS
BY THE ONE HUNDRED FRIENDS
OF PITTSBURGH ART.



OLD MAN, BY M. PETROVITS.
PRESENTED IN 1921 TO THE PITTSBURGH SCHOOLS
BY ONE HUNDRED FRIENDS OF
PITTSBURGH ART.

acquiescence to the suggestion was most cordial and re-assuring, and, if the addresses of acceptance each year indicate at all the feeling of the school authorities toward this plan, then it may surely be said to be signally successful.

The director of art for the state of Pennsylvania has repeatedly said that Pittsburgh far surpasses any city, of which he has knowledge, in its attention to art in the schools, and attributes most of this success to the encouragement given the study by the "One Hundred Friends of Pittsburgh Art."

Individual contributions to the art collection have been inspired by the gifts of the One Hundred Friends, and a very important item of this nature was donated by Mr. James Bonar, the president of the local artists' association, (who is also known as the superintendent of buildings and custodian of property of the Pittsburgh schools), and is in the form of a triptych, and located in a lunette directly opposite the main entrance to the Fifth Avenue High School.

The result of the first six years' efforts of the organization is a collection of 28 paintings, by 22 artists, and so important are many of them they are frequently sought by the art museums of the country for exhibition purposes.

One painting in this collection has been awarded one of the principal prizes by the National Academy of Design in New York City, and the painting has been shown in many of the largest art institutions in the United States.

Six thousand dollars' worth of paintings, in six years, is our record of purchases and gifts, and today the public schools of Pittsburgh possess the nucleus of what will some day be a complete chronological record of Pittsburgh art from 1916, and which will, also be an everlasting memorial to the generosity of each and every contributor to the fund which has made the collection possible, as the names of the members of the One Hundred Friends are attached to the back of each picture, as donated.

Because of removals from the city, deaths, withdrawals, and other causes, there occur vacancies among the One Hundred Friends, but their places are quickly filled by other friends

who approve of the plan, and are glad to become identified with it.

To date, the plan of circulating the pictures, has been to show the entire collection in the various high schools, but the number is now so large that a plan for showing the items individually will soon be tried in the belief that a larger number of pupils will be reached, and, unconsciously, influenced in their daily contact with them.

The director of art and the supervisors have been most enthusiastic over the pictures as it gives them actual demonstrations for their talks, and visualizes much which would otherwise be difficult of explanation.

One very noticeable result of the school art collection, is the increasing attendance at the Carnegie Art Gallery and its co-ordinated departments of the Carnegie Institute.

It only requires a few sentences in the occasional art talks, to say to the pupils of any grade, that if they like beautiful pictures, a visit to your local art institute on a Saturday or Sunday afternoon, or any evening during the week, will well repay the time spent. Such contact soon begets a habit which causes the pupils to visit every new exhibition announced at the gallery, and to talk about it to their companions, with the result that they soon, unconsciously, become not only interested in art matters, but even critical. Consequently it is not long until a framed, colored photograph print, illustration, or other evidence of taste begins to find itself in the home of the otherwise poor.

This first indication of "love of the beautiful" is the beginning of a cultural development, the outcome of which none can measure, nor even reasonably prophesy. The artistic and the beautiful of today must become the common place of tomorrow and must contribute with other influences to aid us in recovering from our unrest of extravagance, excitements, sexual abandon in dress, bad manners, disrespect and irreverence.

The need of space for the hundreds of children seeking admission to our schools, and the supplying of a sufficient and proficient teaching



VERA, BY FRED A. DEMMLER.
PRESENTED IN 1917 TO THE PITTSBURGH SCHOOLS
BY ONE HUNDRED FRIENDS OF
PITTSBURGH ART.

force must of necessity have the first and continued thought of our school boards. Until those deficiencies are fully cared for, it is useless to expect any great interest from the governing bodies in this departure from old and established customs, or conventional educational efforts. It takes a live, wide-awake, up-to-date school board to appreciate a collaborative program as is suggested by the Pittsburgh idea. Just here, it may be added parenthetically that few large cities are served by such efficient and sacrificing persons as constitute the Pittsburgh board of education, for our educational work has been entirely divorced from politics. The men and women who look after the welfare of our children, are selected from our best citizenship, by the judges of our common pleas courts.

Art journals, in all the large cities of the country have frequently commented on the unique organization of the Hundred Friends of Art, its plan and accomplishments. It is with



A BUCKS COUNTY (PENNSYLVANIA) LANDMARK, BY G. W. STOTTER.
GIFT OF ONE HUNDRED FRIENDS OF PITTSBURGH ART TO THE PITTSBURGH SCHOOLS.



CURTAINED WINDOW, A. A. READIO.
GIFT OF ONE HUNDRED FRIENDS OF PITTSBURGH ART
TO THE PITTSBURGH SCHOOLS.



PORTRAIT OF A YOUNG GIRL.
PRESENTED TO THE PITTSBURGH SCHOOLS BY ONE
HUNDRED FRIENDS OF PITTSBURGH ART.

a great deal of satisfaction that we are now able to report like organizations in St. Louis, Baltimore, Kansas City, and inquiries from many other sources.

The pictures reproduced are representative items of the 28 donations made during our six years' collaboration.

The fact that 22 artists are represented in the school collection is evidence of the stimulation given their effort when during the first two

years it was hard to find many artists whose works were up to our idea of the standard to which we should adhere.

In closing let me say: Take some of your art to the public schools. Do not house it in out-of-the-way places, requiring carfares and loss of time; open only at hours inconvenient to children, often charging admission, or even requiring children to be accompanied by older persons,

and seldom having any one to try and interest them.

Bringing art to the schools will revive the teacher's interest in art education, cause her to get more than a passing knowledge of the subject, in order to talk about pictures to her pupils—beautify the unusually bare walls, and help materially to make popular, what is still looked upon by some children as a penance—the school-room.

What Kind of a Teacher?

Prof. A. P. Kephart, N. C. College for Women, Greensboro

Will school patrons ever agree on what a school or a teacher ought to be? Will all parents ever approve the same school, teacher, methods, or administration? Do parents express themselves about these matters? Is there evidence of an awakening of interest and an increase of information among parents with reference to the problems of the school?

In studies of pedagogical problems the parent of the school child has been kept in the background. At times he develops into a sort of mirage either threatening or deceiving the way-worn or perplexed pedagog, at other times just a background meaning home, food, clothing, reports; a taxpaying, technically uninformed and professionally disinterested hopeful, ready to praise or condemn as Johnny comes marching home with an account of the doings of the day or a table of measures reviewing the month's performances.

Only in a sort of discursive fiction, full of pedagogical propaganda, has the parent expressed himself freely about the teacher and her school; except over the neighborly fence and about the dining table. The parent has been written about in educational literature, but the treatment has been as cold-blooded as any treatment of crops, birth rates, calories, or butterfat. He has been treated statistically in terms of nationality, occupation, economic status, literacy; but never in terms of opinions, impressions, desires, bitterness and praise.

Some of us teachers have thought that parents are not greatly concerned about teacher qualifications, courses of study, equipment,

and administrative problems because they know nothing about them. We have thought that they are not concerned about anything except the successful passing from grade to grade each year. When some of us became parents we began to see that, limited as they may be with reference to professional insight, there is another kind of interest on the part of parents,

an interest that puts a lump in the throat when Tilly reports a failure, tears in the eyes when Henry confesses that he has been punished in school, and a swelling of the chest when Helen is elected to a schoolroom seat of honor and of resentment when there are evidences of partiality. A mother of a rather dull boy expressed it this way: "The teacher should make an effort to draw out the diffident child rather than to show off the bright ones." Parents feel and hope, blame and praise, weep real tears of joy and sorrow over the successes and failures of their own.

Certainly, if any factor in the school-community situation ought to be surveyed, the parent should have his opinions, criticisms, desires, and impressions collected, tabulated and manipulated. He is certainly not the least factor in the complex. An array or display of his feelings and convictions may give us some information as to his attitude, his ability to follow the evolution of theory and practice in education, and his insight into a piece of work which he finances but rarely studies.

What really suggested the pursuing of the project about to be reported to you were several cases in which parents expressed themselves either directly or through their children.

Mr. Silver threatened to whip the principal if an apology did not materialize as the result of some "unjust" handling of his son.

Janie Jennings, who did not "go up" at the end of the year, made the following comment to her playmates about the first grade teacher when she was questioned about her failure to



THE WHITE PARASOL,
BY ELIZABETH L. ROTHWELL.
GIFT OF ONE HUNDRED FRIENDS
OF PITTSBURGH ART.

be promoted: "That old Miss Blovern just can't be trusted."

Calvin Polman was a boy of 13 and in the fifth grade. He was mechanically inclined and arithmetically, linguistically, and historically disinclined. He showed a great interest in the small amount of manual training which he was permitted to enjoy several times a week. His mother, a woman of very limited education, had been a member of the parent-teacher association for one year. She came to the principal with the following inquiry: "Why can't our boys be given more manual work and use that to make them interested in arithmetic and grammar?"

It occurred to me that parents might welcome an opportunity to express themselves upon some phase of the work and administration of the school. I therefore prepared a simple questionnaire and sent it to every home in the city. A copy was given to every child with the instruction that only one copy was to be returned from each home. The following is the questionnaire:

Parent of the School-child:—

Please list in order of relative importance the ten qualities that you think a first class teacher for your child should have. That is, put at the top the most important quality and at the bottom the least important. Select the qualities from the suggested list or name any of your own selection.

Please have your child return this at once. In the training of teachers we are anxious to know what parents want the teacher to be.

Suggested List:	Your List.
cooperation	1.
initiative or originality	2.
dignity	3.
personality	4.
character	5.
appearance	6.
sincerity	7.
kindness	8.
patience	9.
optimism	10.
enthusiasm	
health	
teaching skill	
thoroughness	
ability to use good English	
scholarship	
discipline	
tact	
sense of humor	
sociability	
How many children have you?.....	
Do you attend a Parent-Teacher organization?..	
What suggestions have you to offer for the improvement of your school?.....	

What Kind of a Teacher?

Eleven hundred copies were distributed in Greensboro, North Carolina, a city of 20,000 population. Five hundred and forty one copies were returned. Since there is a going parent teacher Association at each of the seven schools in the city it seemed reasonable to make a study of the results from the standpoint of membership or non-membership in such associations. There were 292 returned by members and 249 returned by non-members. The opportunity for statistical manipulation is slight. The quantitative results are not definitely significant. But the opinions, desires, hopes, and interests of of parents are apparent and very suggestive to teachers and administrators, and are presented because of this rather than because the quantitative results seem convincing. The evidences of educational awakening, of willingness to sacrifice for better schools, and of openmindedness upon the part of those who leave so much of moment to our care are inspiring.

There are two chief sets of results:

1. The vote on the qualities of a good teacher.
2. The suggestions for improvement of the schools.

A compilation of the results on the qualities of a desirable teacher gives the following array from the first to tenth in order of desirability.

Members of P. T. A.

1. character
2. patience
3. kindness
4. sincerity
5. teaching skill
6. discipline
7. thoroughness
8. tact
9. sense of humor
10. sociability

Non-members.

- character
- kindness
- patience
- sincerity
- discipline
- health
- tact
- good English
- sense of humor
- sociability

All.

1. character
2. patience
3. kindness
4. sincerity
5. discipline
6. thoroughness
7. tact
8. good English
9. sense of humor
10. sociability

The only apparent differences in the arrangement of qualities is that members of parent-teacher associations include teaching skill and non members do not. The former rank it fifth in order of preference. Whether this is significant at all or more significant than the fact that non-members include health while members do not is left to the judgment of the reader. That the first four qualities, character, patience, kindness, sincerity refer to the finest of human characteristics and the last six more or less to method and acquired qualifications is at least indicative that parents are primarily interested in their children as developing personalities rather than units to be educated according to the ordinary school procedures. Parents are thus giving voice to educational aims which are in accord with our best thought, and they do it without all the technical preparation and experimentation of the schoolmen. They aim at the production of useful, cooperative, sympathetic, and honorable citizens.

The results of this vote were tabulated also with reference to whether there were two or less children and more than two children in the family. The results are given below with little comment. I am unable to see in them anything of real significance unless it is the fact that those who have two or less children place appearance in the list, while the others do not. Also those with more than two children place teaching skill in the fifth place while those with two or less children do not include it at all.

Two or less.	Two or more.
1. character	character
2. patience	patience
3. kindness	kindness
4. sincerity	sincerity
5. discipline	teaching skill
6. health	thoroughness
7. thoroughness	tact
8. appearance	good English
9. tact	health
10. sociability	sociability

In conclusion, it is very interesting that sense of humor and sociability are placed upon the list while such qualities as dignity, personality, optimism, enthusiasm, scholarship are left out.

Members of parent-teacher associations give a 46 per cent vote for character while non-members give it a 37 per cent vote.

The following additional qualities or characteristics were given with the number of times set to the left except in case of only one vote. These are roughly classified under five heads and thus indicate the trend of thought and attitude.

Ordinary Virtues.

4 impartiality	jolly
3 good judgment	always the same
3 quick to forgive	congenial
2 truthful	strict
2 lovable	harsh
2 lover of her work	meek
2 practical sense	even temper
common sense	thoughtful
social sense	honorable
horse sense	thrifty
sanitary	discerning
good and neat	quiet and distinct
modest	a perfect man or woman
pleasant address	no slang words
refined manners	energetic

true and gentle
temperate
just

General.

- ability
strong
first class
not under twenty years old
free from home worries
- Education, etc.
- 2 good education
 - 2 best educated
 - 2 practical education
 - 2 experienced
 - preparedness
 - thorough understanding of child
 - sympathetic understanding of child
 - ability to solve problems of the teacher
 - sustained interest in her work
 - ability to secure initiative upon part of child
 - maintain and inspire confidence
 - demand respect of child
 - careful not to talk about anything not posted on
 - careful as to ratings
 - good nerves
 - poise

Religion.

- 5 faithful Christian
- 2 christain teaching of good moral and religious family
- prayerful
- love of God
- Bible reading
- reverence
- reverence for Jehova

These have been given just about as they were listed. In a few cases very similar terms were combined in one since they implied exactly the same idea and were not unique enough to be worth listing separately. Below is a list of unique and peculiar characteristics desired by a few parents. It is a little difficult in such cases to know just what the parent was thinking about: reverence, sanitary, quiet and distinct.

The following table is self-explanatory. It is not assumed by the writer that this represents a balanced proportion of these groups in the city. The very great probability is that a higher proportion of members of Parent-Teacher Associations responded. The results must be considered in the light of this fact.

School	Members	Non-members	Two or less children	More than two	All
Training ..	57	30	26	61	87
Spring	69	47	68	48	116
Cypres	44	20	27	37	64
Lee	13	35	17	31	48
Simpson ...	15	12	9	18	27
Ashboro ...	29	45	37	37	74
Lindsey ...	65	60	44	81	125
Totals ...	292	249	228	313	541
	54%	46%	42%	58%	

The following are the suggestions for the improvement of the schools tabulated under the general heads of buildings and grounds, teacher, administration, curriculum, with the number of parents mentioning each set to the right. There were 134 such suggestions. Of these 83 or 62 percent were given by members of parent teacher associations and 52 or 38 percent by non-members.

Buildings and Grounds.

New and larger buildings.....	20
Water fountains	14
Sanitary conditions	10
Better playgrounds	5
Larger playgrounds	3
Better lighting	3
Chapel	3
Better toilets	2
Better heating plant	1
Fire escapes	1
Shade trees	1
Better equipment	1

Administration.

Increased salaries	29
Playground director	8
Better teachers	5
More time for the backward	4
Shorter term	3

(Continued on Page 84)

The Public School Principal

A. F. Benson, Principal Jordan Junior High School, Minneapolis

The principal of a school is the man at the head of a definite unit of a school system known as a school building. He may, or may not, devote part of his time to regular classroom work.

The duties of a principal, his relation to the school system, his place in the local community, and his function as a member of society at large have changed very materially within a decade. He is no longer a recluse looking at the world through green goggles but he is stepping out of the cloister and with head erect looking the whole world in the face. He is thinking, and will continue to think of himself first as a man, then as a schoolman. Principalships are an established part of a city school system. How they function, and the value of that functioning, depends upon the men and women who are found in these positions of trust.

The Principal as a Business Executive.

As a business executive a principal is the head of an institution second to none in its importance and demanding a very strong type of executive ability. It is sad but true that the non-executive type of an individual does get into a school executive position. More than one good classroom teacher has been spoiled by being changed—not promoted—from classroom to office.

As a business executive, a principal must have his hand upon every activity within his building. He is responsible for all work being done within the plant from that of the janitor to that of the teacher. Many things may be delegated to his coworkers, his clerks, and his engineers but, in the last analysis, everything comes to a head in the principal's office. All directions to any special group of workers in any building must reach such group through the building office, no matter from whom they come or to whom they go.

No president of a corporation would think of removing an employee without first consulting the head of the department in which the employee is working. Should he do so it would be considered as an indication of a lack of confidence. Neither ought any principal be expected to submit to the removal of even the humblest employee without first being consulted. An unknown—to the principal—change between sunset and sunrise is not a good business principle, to say nothing of its ethical standard. I assume this is rare in most cities, but it is done in many school systems; possibly through the necessity caused by the lack of executive ability on the part of persons holding executive positions.

The reduction of waste in the running and the operating of the physical plant is to me a very important part of a principal's work. I do not now have in mind what we often speak of as educational waste. I do mean, however, the waste that comes in the ordering, the care, and the use of building equipment and supplies. I mean the reduction of the waste caused through an imperfect organization resulting in an unbalanced load. It is the principal who must reduce to the minimum the waste in the running of the physical plant. I think I am safe in saying that we are not giving the attention we should to this phase of the work. If we cannot do this, then at this point we fail as executives.

No one should know, and I think no one does know better than the principal, the supplies that are necessary to do the work. Yet make our orders as conservative as possible, someone who knows little or nothing about our needs, will cut them fifty per cent or send us something they consider "just as good" and never extend the

courtesy of an explanation. This situation oftentimes leaves highly paid teachers with insufficient material and results in the most extravagant waste. There are many contributing causes where such situations exist, which I cannot at this time consider. Let me say however, that they do show an executive deficit somewhere along the line, caused possibly by the spoiling of an excellent classroom teacher to make an inferior institutional executive. A principal today requires a business type of mind as well as that of the professional. It requires a combination expected in but few, if any, other lines of work. It calls for a stronger and more versatile individual than twenty, or even ten years ago. Are we measuring up to the present day standards? Keep your hand on the pulse of everything connected with your building.

I am inclined to think that there is a limit to the amount of taxation a community can stand before it becomes bankrupt. Be that as it may, the schools of a city are the bulwark of that city and must never suffer from a lack of finances. They will not be allowed to suffer, if as principals, we do our duty in seeing that for every dollar spent on the purely material side of school work there is received by the community one hundred cents' worth of efficiency. The spending of public money is a sacred trust and if we are not willing to assume the responsibilities, then again we fail in, at least, one very important phase of our work. If we are unable to assume these same responsibilities then we are in "the wrong pew" though we may be in the right church.

The Principal as an Educational Executive.

An educational executive does not always imply an educational leader. The one may not be the other. An educational executive is one who is able to carry out an educational program. This may be, to him, a mysterious something handed down "from above" which he must put into execution. This program, on the other hand, may be a "project," with a "purposeful" activity which he has had an intelligent part in developing. From whatever source may come the educational program or course of study, it is the business of an educational executive to so organize his man and woman power to carry it out consistently with economy and efficiency. This phase of the work is distinct from that of the strictly business or mechanical organizing and directing of the school, though the one dovetails or overlaps the other. Too often, I fear the work of a purely educational executive becomes as mechanical and as lifeless, as does that of the man who shovels coal into the furnace with no other horizon than furnace, coal and shovel.

In carrying out any program, the principal must never lose sight of the fact that he is dealing, not with inanimate things, but with men, women, and children who feel as he feels, who think as he thinks, and who are as intensely human as he is. When an executive comes to the point where he is self centered, at that moment he has purchased a through ticket to an ignominious failure. Cooperation, and not blind following is needed to carry out any plan no matter from whence cometh that plan. Personally, I consider program making, classifying, testing, the circulating of pupils throughout the building, and every other thing of similar nature necessary to carry out the program we are working toward, as a part of my business as an educational executive.

Success in this particular field of the principal's work in no way guarantees educational leadership though it does presuppose it. In some school systems leadership is not desired, therefore it is not developed, neither does it enter into required qualifications. The executive ability to "put over" a plan is commendable but it falls very far short of being the complete work of a school principal.

The Principal as an Educational Leader.

Leadership in any activity implies a degree of autocracy. It makes no material difference whether that leadership be vested in an individual, a majority, or in a minority group. The most autocratic aggregation of people imaginable is a minority group which confuses self egotism with righteousness. The most contemptible individual is the one in a position of influence who is an absolute autocrat. Leadership is synonymous with co-operation based on intelligent confidence. No school can be operated on a mass-meeting basis. There must be a head, and if that head is alive, there will be at times autocratic decisions. It is not having decisions made to which teachers object, it is being ignored altogether in the forming of these decisions that has caused teachers to become restless and sometimes silently vindictive. Yesterday the type of principal supervision was largely co-ersive; today it is creative.

The principal has the opportunity to have, and he must have a broader educational vision, than does the average classroom teacher. This is his business. He is an educational diagnostician. In ninety per cent of the cases, the classroom teacher would have just as extended a horizon had she the time and were that her business. She has a perfect right to demand a far-visioned type of leadership from her principal. Be it said to our shame that many times she is disappointed. An educational philosophy, an appreciation of human values, an evaluation of present day demands in social terms, and a holy respect for individuality are a part of the necessary equipment of a twentieth century principal.

We sometimes hear a principal say that teachers in certain lines want so-and-so and since they are teaching the subject they know what is right. The trouble with this and similar statements is that it is only about fifty per cent true. Such statements are many times the unintentional public acknowledgment of a personal deficit in educational leadership. A teacher who day after day is teaching one or two subjects is too close to the subject itself to have a good perspective of its relation to the whole ideal of education in terms of present-day requirements. This statement is no reflection on the splendid body of teachers in the schools in any community. It is the principal's business as an educational leader, to bring to his body of faithful teachers the background into which they, day by day, conscientiously, faithfully, and successfully are placing their contribution to the great work of shortening the apprenticeship in this wonderful business of living.

Are we, you and I, as principals in these schools, measuring up to what our teachers have a right to demand of us as principals, or are we wasting their time, the time of boys and girls, and our own by putting over non-essentials and splitting hairs over things that tomorrow are gone forever? Are we directing the gaze of our teaching body to the educational hilltops from whence cometh their help? Are we creating teaching conditions enabling a teacher to ex-

press herself through her work, or do we curtail her effectiveness through keeping our own eyes upon nerve-racking, soul-contracting things that get us nowhere? These are questions for each individual to answer to his personal satisfaction. The answer given spells the effectiveness of the principal, or it blazes to the world his ineffectiveness as an educational leader.

Principals ought to be much greater forces in educational leadership of their cities. Too often they stand back, letting the superintendent or the teacher take the lead while they meekly follow. This is not commendatory. The superintendent and his body of principals and teachers can make the educational public opinion of any city, but this can be done only as the principals are safe, sane, and sound in leadership.

Leadership implies supervision and supervision is leadership. No human being can say definitely that supervision begins at any one given point and ends at another. There is no activity upon which the principal has his hand that does not directly, or indirectly, terminate in school supervision. A broader and more socialized vision of supervision is, it seems to me, one of the great needs of those whose positions require the directing of the educational work of any individual school or school system. One of the first duties of a principal is to insist upon having a corp of efficient teachers, clerks, and janitors. A second duty is to formulate an educational policy together with his teaching body. A third duty is to create the working conditions under which teachers may express themselves through their work. He must be an individual who can, and does keep, his teachers on "tip toe" as it were, not through subservient loyalty but because of the creative cooperation of his entire force of co-workers. This does not mean that at times he will not be obliged to step heavily upon many traditional educational toes. He will, but in so doing the respect of his corp is still maintained. Supervision cannot be reckoned by the minute hand of the clock. Supervision is the personality of the individual sympathetically, yet firmly, permeating every activity of the school life and leaving its impact upon the work of each pupil and each teacher, thus assisting them to develop their highest and fullest possibilities.

I do not like the word "training" when it is coupled with that of "teacher." It savors too much of dead routine. I would much rather speak of "teacher growth in service" than of "teacher training in service." It makes no difference how well prepared a teacher may be when she comes into our school system there is, with her entry, an obligation assumed by the system itself that is other than financial. That obligation is one of furnishing opportunity for professional growth. In the discharging of this obligation, principals must play an important part. Superintendent, assistant superintendents, and special supervisors cannot do it all. In fact, the very nature of the situation enables them to do but a very limited part. Some individuals are so constituted that they need no incentive outside of themselves and will not allow themselves to become so involved in the necessary routine and limitations of a special subject as to stunt development. Many other splendid teachers start out well but are soon weighed down and, unless led forward, gradually lose their effectiveness. There never has been a time prior to the present when it was as possible for an educational Rip Van Winkle sleep to be taken in ten months and when the awakening, if it does come, in upon as changed a world, educationally speaking, as that changed social world upon which Rip opened his eyes after a twenty-year sleep in the mountains.

The principal in his capacity of leadership must see to it that conditions do *not* exist in which it is possible for a teacher to cease her professional development. Each principal will have his own way for carrying out the program of educational leadership. I would, however, like to see some concerted move made by the principals toward calling to the attention of the Board of Education the importance and the effectiveness of bringing to our teaching body once each quarter men and women outstanding in national affairs with their vision and their message—not to be delivered after the close of a heavy day's work, but during school hours. This would supplement the splendid work done by superintendents, supervisors and principals.

Again as an educational leader a principal must sell the educational program to his community. This applies not alone to a local program but also to state and national policies. More and more must he realize that it is his business to insist that public schools serve all of the people all of the time. Ever increasingly should clubs and other public or semi public bodies call upon school principals to explain and discuss problems of vital interest to the educational welfare of the city. This is a part of our business and it ought to be a very big part of our business.

Honesty and Backbone.

Men who are spineless have no business to hold principalships in city schools. It takes courage to conduct a modern school. It takes a backbone that is more than a rag to deal with pupils, teachers, and with the community.

Honesty even though it hurts is expected to be a part of the equipment of a school executive.

Public Printing of School Books

Can government consistently become a competitor to private enterprise? Let us see!

The primary function of government is to maintain law and order, and promote the moral and material welfare of its people. Thus, the several branches of government deal constantly with the enforcement of justice, and with regulations designed to grant a free roadway to activities making for enlightenment, progress and contentment.

The legislative bodies concern themselves to a large extent with measures making for the industrial and commercial advancement of state and nation. In no instance does government pretend to usurp the function of individual enterprise. It seeks to encourage a full expression of that energy and industry in all pursuits which make for economic stability and the prosperity of the nation.

American statesmen have never believed in a socialized state and have frowned upon the government monopoly of industry as exemplified in the several countries of Central Europe and in Russia. In the United States we have made a proud boast of our adherence to the principles of democracy and individual opportunity.

And yet, some of the states have in the past engaged in queer antics. They have unconsciously stultified the basic principles upon which the Republic is founded. The state of California has for many years been zealous in marketing its products, fruit, lumber and minerals, and in inviting tourists to inhale its balmy air, and incidentally leave their dollars there. But, at the very shrine of Americanism, the public schools, California turned its back upon principles of industrial opportunity and freedom of commerce, and bowed to the sordidness of government monopoly.

"We call upon the East to buy our products" was its slogan, and then calmly proceeded to

I mean honesty of purpose, honesty in administration, honesty toward the educational needs, and the honesty that rings with loyalty to our teaching body. I mean that honesty that eliminates petty jealousies and non-professional attitude toward our fellow-workers, that will be fair and square with those whose visions may differ from ours, realizing that truth was not born with us and that it will not pass away with our exit from this world. Frankness in making statements to teachers that correspond to those made at the superintendent's office is a very strong factor in establishing and maintaining harmonious relations.

A principal must not ignore the problem of his teachers' salaries. Their financial remuneration is vital to the success of the schools and as an executive a principal is in duty bound to do everything in his power to see that teachers are paid a salary at least somewhat commensurate with the position and the service required. It is always distasteful to be compelled to constantly ask for increase in personal financial consideration for service rendered to the public, just because it is a personal matter made public. I wish it were possible for principals to so handle the salary schedule and increases that teachers would know their interests are looked after, without they themselves being obliged to carry on campaigns. This ideal is far from being realized. Some day it may be. Till then our present plan seems to be the only workable one.

Today a principalship is a sacred trust—a trust requiring men and women who stand erect and four-square to the complex problems of modern life as they affect, or are affected, by that social organization known as a school.

boycott one of the most important articles produced outside of the state. "Our state government is not beholden to the American spirit. It can print its own schoolbooks and perhaps save a dollar that otherwise would go to the East, and not find reinvestment in California fruit." That was its dictum.

And the Chinese wall was constructed and excluded that American genius which combined rare pedagogic authorship with the highest mechanical skill in producing the best textbooks the world has known. The educational interests of the California child became secondary to the ambitions of the politician.

Now the city of Chicago, whose marvellous growth and material is born of individual initiative and nursed by the productive ability of nearly one-half of the continent is about to stultify the American spirit, by planning a soviet schoolbook factory. The board of education of that city proposes to write, print and publish its own schoolbooks, and stop buying the superior product now afforded in an open market.

Aside from the principle at stake here, it develops that the immediate economies involved do not warrant the public authorities to invade the domain of private enterprise, and engage in an industry which demands superior scholastic and technical knowledge. The competitive attitude of the textbook publishers has never permitted exorbitant prices. Besides, any money saved by city or state in doing its own schoolbook publishing will necessarily result in an inferior product.

When California found its home-baked schoolbook enterprise confronted with a fiasco it leased the plates of antiquated texts of eastern publishers. The state of Kansas, which is also a producer of schoolbooks, did likewise. Both states have discovered that the

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Cooperation Between School Boards and Public

T. C. Hart, President School Board of Palatine, Illinois, Township

One of the most important questions of school administration is the relationship between school boards and public. The secretary of a certain school board which had been involved in a great deal of litigation involving the legality of its district recently made the remark that their attorneys' fees were so large that they didn't dare tell the tax payers what they were, that they hadn't begun to pay them yet and they didn't see how they ever were going to pay them.

In another instance a certain district which had been in long litigation over a bond issue election was finally straightened out so that a portion of their bonds could be sold, but the amount of the issue left was too small to build an adequate building for the district. Some members of the board said that they were not going to call an election for more bonds until they had spent what money they did have. "We'll make a start on what we've got and then the people will have to vote more bonds to finish the job," was their attitude.

In both of these cases it is a question as to just what will happen when the public finally is informed of the standing of their district. Personally, I think that in both cases, it would have been far better to have kept the public informed all the time as to just what the standing of the district was, how much money it was taking, and was liable to take to pay attorneys' fees and build adequate buildings. It has been the custom of too many school boards to transact their business in "star chamber" sessions and not take the public into their confidence.

Here in my home township we have just had a most forcible example of what wide open publicity can accomplish in school affairs. Our high school occupies a building jointly with a graded school. When school opened last fall we found that our enrollment had jumped from around fifty pupils to seventy. We had made a gain of about fifty per cent over what the average enrollment of our high school had been during the past six years. The grade school had also made a growth and we were faced with the problem of having more pupils in the one building than could be comfortably handled. What was worse, we could see where our high school enrollment for next year was going to have another big gain, and that we had somehow got to have accommodations somewhere for about one hundred pupils.

Our high school board talked the problem over, then we called a joint meeting of our board and the grade school board. We asked them if they could let us have more room next year and they came back with the statement that they not only could not let us have more room but that they really needed the room we were using for their grade school. Both boards went into a long discussion of our problems and we decided that the best solution of them was for the Township High School district to build a home of its own if it were possible to get such a proposition approved by the people of the township.

Our board resolved that the only possible way to carry such a proposition was to give the widest possible publicity to conditions as they existed in the school, and to let the public know what problems we faced in the future. We enlisted the hearty support of the local paper, and presented to the public through its columns, just what our present and future problems were. Next we called a joint meeting of our high school board, the grade school board, and the boards of directors of the eight country school

districts in our township. We also invited the school trustees of the township and the township treasurer to this meeting.

At this meeting we put our problems of the present and future frankly before the assembled school officials of the township and asked their opinions and advice. After a free discussion of the whole affair the meeting passed a resolution endorsing the proposition of a new township high school building, and calling a public mass meeting to present the facts to the people and to get their ideas. In calling this public meeting we once more used the columns of the local paper freely. Besides that we posted hand bills all over the village and had them distributed in every country school in the township, so that the widest possible publicity was given to the calling of this public meeting.

At this meeting we had a representative gathering of business and professional men, farmers and people from every walk of life. The women folks showed their customary interest in school affairs by being present in good numbers and taking part in the discussion. Once more the entire proposition was fairly and frankly put before the people and a general discussion of the best means of solving our educational problems was entered into by the general public.

The result of that meeting was the adoption of a resolution endorsing the new high school proposition and calling upon our high school board to take the necessary steps for calling such an election. A petition to our board requesting us to call a special election to vote on the selection of a schoolhouse site, the erection of a building and a bond issue with which to pay for it all was started at that public meeting, and three days later was presented to the secretary of our board with the signatures of over five hundred voters of our township.

The board at once met and called a special election asking for a vote on the various propositions and a \$75,000 bond issue, which was almost the five per cent limit allowed by law. Once again we gave the widest possible publicity to our coming election, by posting not only ten notices required but by posting one in every business place and prominent location in the township. We also posted specimen ballots and had a sample of our election notice and ballot printed in the local paper. With the posting of our election notices the campaign was on in full force.

About one-half of the voting strength of our township is composed of farmers. People tried to tell us that the farmers would never in the world vote for a new school with the prices of farm products down where they were. Some people told us that we were absolutely crazy to even think that the propositions could carry, that we ought to be satisfied with getting a schoolhouse site first before trying to build a schoolhouse.

On our selection of a school site we also gave the widest publicity and choice possible. Instead of only putting one or two sites on the ballot we put on five, all widely scattered about the town. We were asking for five acres and some people told us we were killing the whole proposition by asking for so large a site. Members of our board went before the local commercial association, and also before the Tax Payers' League, explaining the educational problems which confronted us and asking the support of these organizations. In each case the organizations endorsed the propositions, as did

some of the ladies' organizations of the town.

All the time we kept the educational situation before the people by means of our local paper. We didn't rave and splurge with a lot of propaganda; we held to straight, bare facts. We refused the proffered aid of outside speakers, believing that this was a family affair to be settled without aid or interference from outside sources.

A great many people told us we were making a mistake by so much publicity, that we ought to keep quiet on some things, but the feeling of our board was that we could not have too much publicity on the facts. We were elected to administer school affairs as the representatives of the people and we were determined that we were going to give the people all the facts and let them tell us, their official representatives, what they wanted us to do.

The campaign was the quietest election campaign ever held in this part of the state. No one was doing much talking, no one knew what a person was thinking or how he was going to vote. On the day of election one man told us that we ought to get out a squad of automobiles to bring in the favorable vote. We replied that we didn't know which ones to bring in because we didn't know who were for the proposition or who against it. We had put the facts frankly and clearly before the people and we were ready to abide by the result.

Election day came, a beautiful, clear, crisp November day. We kept the polls open for six hours, from 3 to 9 P. M. The roads were in fine condition, so there would be no excuse for a farmer not voting if he wanted to. The voters came. There was no organized work for, or against, the proposition on election day other than people reminding their friends to get out and vote. From the opening of the polls the vote was light. When the ballots were counted we found that only 475 out of a possible 1596 had voted, and of the 475 voters, only 174 had voted against the proposition of a new school and the issuing of \$75,000 bonds. Evidently the great majority of the people were satisfied that the new school was a necessity and didn't take the trouble to come out and vote. The wide open publicity had allayed any fears that our board was trying to put anything over. The public was satisfied that what we had presented were facts and they were willing for us to go ahead as their representatives, and solve the educational problems of the district.

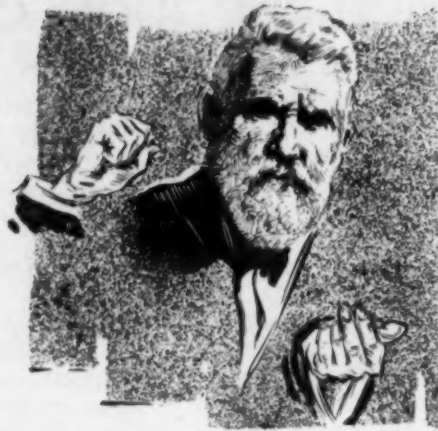
After the election one of the business men of the town told me "You fellows explained everything so fully that everyone is satisfied." Another man said, "It took us two years to get the consent of the people of the local district to build that grade school and here you fellows have got the consent of the whole township to spend about three times as much money and it has only taken you two months. It's wonderful."

But there really isn't anything wonderful about it. The whole thing is simply a concrete illustration of what the open door policy will do in school affairs, of what can be accomplished where school board and public understand each other and work together. There has been too much of the "star chamber" element in school affairs as well as in a great many other public affairs. Some school boards seem to labor under the impression that once they are elected to office their contact with the public is ended; that they are elected to run the affairs of their school as they themselves see fit. Our board

holds the opposite view. We feel that we are elected to administer school affairs as the public wants them administered. We believe when any vital problem in school administration comes up, that it is not alone up to us to solve the problem but that we should submit it back to the people whom we represent, for their consideration and for their recommendation as to the solution.

Of course a school board is first to come in touch with educational problems. It is natural for the members to give the problems more consideration than the average citizen but we believe that a greater interest in school affairs can be maintained, by taking the public fully and frankly into the confidence of the board for a mutual discussion of vital problems. Of course if we have what we think is the right solution, of a problem, we do not hesitate to tell the public what we think and to recommend our solution. We are at all time ready and willing to be convinced that we are wrong if some one has a better solution of a problem than our own.

One of the greatest advantages which we have found in our policy of wide open publicity about school affairs is that we have created an interest in school affairs among the hardest class of people in the world to interest in such things—and that is the taxpayer who pays taxes toward the support of the school but who has no children of his own getting the benefits of the school. This class of citizen is very often antagonistic to better education and anything which can be done to get him interested is surely a long step in the right direction.



We have found that by talking over our school problems freely with people, and by using wide open publicity in our local paper, we have created a much greater interest in our school as a civic institution, as a concrete part of the community which is working for the good of all the people and not simply for the good of those who have children in the school. It is really amazing, and at the same time highly gratifying, to see the interest which people are taking in our school who previously to the open door policy gave the school little thought. What thought they did give it was the amount of money it was taking to run it, and how much more their taxes were than they would be without a high school in the community.

I have heard many school board members talking about how they must keep this or that thing "under cover." I have heard them say that "The people don't know what they want anyway so we will just put this over," and many other things of that nature. Personally, I feel that such an attitude is wrong. Our own board of education feels that such an attitude is wrong and that the longer such tactics persist, that much longer will the day be put off when there will be a free spirit of cooperation among school boards and the public which they serve. And it is only through such cooperation that we can hope to make our schools the power which they should be in our various communities. Wide open publicity as to what our schools are doing, as to what the problems of school administration are, and as to how best to solve those problems, will bring a greater spirit of confidence and a clearer understanding of conditions to the general public. And with this understanding on the part of the public, with their appreciation of the various problems of school administration, will come a greater confidence in their school boards and a better harmony between boards and public. And this harmony means a real spirit of community cooperation which spells greater strength and success in our schools. Here in our own township we have proved what publicity and the open door can do. What we have done is nothing miraculous. It will work anywhere in the long run and it will bring close cooperation between school board and public.

Teacher Participation in the Small City

Carl G. Leech, Supervising Principal of Schools, Quakertown, Pa.

Teacher participation in school administration is decidedly the vogue today. It has its defenders and its traducers. The degree of support which the idea receives from superintendents is probably indicative to a great extent of the type of administrative organization found under these various leaders.

An executive who is jealous of authority and concedes little initiative to his subordinates, will scarcely welcome this device; but in any system where the life and spirit of the schools is one of growth for pupils, teachers and superintendent, a true leader will welcome and will anxiously seek to build up a feeling of cooperation, of pride and of self-confidence in all parts of his system which will stimulate initiative and breed good-will and mutual respect.

All of the studies so far made of the problem of teacher participation have referred to comparatively large school districts. This is entirely natural, since the minds of most students of the subject have run to "teachers' councils," a type of participation which would be undesirable in a system of fewer than thirty teachers, since almost any effective plan of representation in such a district would be found to include so many teachers as to raise suspicion of needless discrimination in the minds of the teachers not chosen.

Here, too, homogeneous groups are so small as to form of themselves ideal media for cooperative effort on the part of teachers and superintendent, and yet sufficiently large to permit of individual differentiation of effort and interest on the part of the teachers in any such undertaking.

Informal Group Participation.

It is true that in smaller school districts and indeed in many large ones, there has always been some form of teacher participation. When-

ever a principal or superintendent asks the advice or assistance of one of his subordinates in the solution of an administrative problem, we have the simplest form of teacher participation.

From this, it is only the briefest step toward asking the cooperation or assistance of a group of teachers in some administrative problem, without the employment of any organized form of control for the group, and this is the ideal form of teacher participation in the smaller cities of the type suggested.

Without a doubt, the more informal the groups in such cases, the higher the degree of cooperation on the part of the entire teaching staff will be, and the more certain will be that feeling of common purpose and of common interest which is so important in maintaining the effectiveness and the initiative of the individual teacher.

In this form teacher participation has existed the country over for many decades, and except for unusual contingencies, it would seem to be the only desirable plan. In these group conferences, the skillful superintendent will be able to stimulate initiative on the part of the teachers, and will be able to provide the necessary opportunities for its expression.

It was in one of these group conferences that the opportunity arose recently in the Quakertown schools for a splendid type of teacher cooperation. The feeling existed among certain teachers in the lower grades, as well as in the mind of the supervising principal, that the system of reading in use in the schools was not serving the needs of the children, and that the results secured were below par. The results of standard tests seemed to confirm this view. It was felt that the material was uninteresting and unsuited to the children, and that the method was uneconomical.

The Initial Steps.

Finally a meeting was called of the ten teachers of grades one to four inclusive, where this basal reading system was in use, and they were asked to consider the problem. Naturally, the question arose as to how we should proceed to put the matter before the board of education in the most forceful way possible; also, how secure a measure of agreement among the group as to what change in the situation should be recommended. This brought to mind the fact that in so serious a matter as a change in the basal reading system, we should know to the best of our ability that any system we favored would meet the needs of the pupils in the highest degree possible, and not depend upon mere superficial preference or upon half knowledge.

To this end it was agreed that we would make an intensive study of representative systems and determine as accurately as possible the merits and defects of each, then after such a study, teachers could make their choices known by ranking the various systems under consideration. It was agreed by the supervising principal that he would recommend to the board of education any system so chosen by a majority of the teachers, and would endeavor to secure its approval.

The next step was to determine the bases of judgment for comparison of the various systems or methods. What features of these systems should be considered in arriving at a final choice? How should these features be assigned their relative values of importance? The supervising principal suggested that a tentative scale should be drawn up in such a manner as to include the various features to be compared, and that by vote of the group, these should then be assigned values in the scale. It was felt that while the values assigned by the group might

not be those which would be assigned by the medial judgment of experts, they would still prove to be a satisfactory basis for comparison in our group.

Scales and Values.

With these facts in mind, a scale was built up, and values assigned on the basis of a total certain number of points. It was concluded that the scale should deal with four main features of the systems, namely: 1. aim, 2. method, 3. material, 4. physical make-up. These were broken up into many subdivisions, and the analysis made as complete as seemed advisable for our purposes.

To each of the four main divisions was then assigned the number of points on the scale agreed by the group, and these values split up among the many sub-divisions. The group then went through the ten systems secured from the various publishers, and compared them on the basis of the points suggested. This in itself took several weeks of study.

At a time agreed upon, the supervising principal handed each teacher a score card on which the scores of the different systems were to be entered in detail, thus covering all points of the scale. The system receiving the highest point score on any teacher's card was then taken as that teacher's first choice, and the one receiving the next highest score became her second choice. The supervising principal then received the score cards, his own included, and by combining the judgments of all cards, reached a conclusion which, if not scientific, at least represented the result of systematic analysis and comparison.

It will be contended, perhaps, that the judgment of the teachers was probably warped by some subjective elements not capable of being controlled, and this is possibly true. It is also true, that a great deal more of objective analysis and study was in this way secured on the matter than could have been secured by simply asking for each teacher's preference based on personal prejudice.

It is with the thought that the results of our study may be of some value to teachers or administrators elsewhere, that I add below the analysis on which our scale was based. It is simple and easy of application, and can be made the basis of a study of systems of reading which will prove of value to any group of teachers interested.

This represents a type of teacher participation which any type of district can employ. It touches upon a matter of the highest interest to teachers and of the greatest importance to their success, and gives the superintendent and the principal an opportunity to secure cooperation, which he cannot afford to pass by.

The Scale. General Points: I. Aim. II. Material. III. Method. IV. Physical Features.

ANALYSIS. DISCUSSION. POINT VALUE.

I. AIM.

1. Word Getting or Pronunciation.

"Development of power to recognize and call words, making reading a matter of word pronouncing mainly." (Huey).

2. Thought Getting.

"The ability to extract thought from the printed page." "All other aims, such as pronunciation, expression, language, diction, must be subordinated to reading for thought." (Klapper).

First essential in this matter is to determine what aim one makes most important, then apportion point value accordingly.

II. MATERIAL.

1. Relation to child's experience.

a) Does the material relate to experience which is common to all children, or only to a select few? E. g. Mother Goose stories and jingles; animal stories in

which animals are entirely unfamiliar to many children.

b) Is the experience natural, i. e. has it been gained through normal channels, or has it been supplied by the teacher, as through teaching rhymes, jingles, etc.?

c) Is the experience intrinsically interesting to the child or not?

d) Is the experience of real or permanent value to the child in itself, from the standpoint of literary and cultural value, moral value, social value, etc.?

2. Development of Vocabulary, or Word control.

a) Are the words used within the child's past experience or probable early future experience? Note how this will enter into the use of words formed from certain phonetic elements, (rill, mat, mall, pall, etc.).

b) What is the usual number of words per lesson? A better basis of judgment, possibly, would be the number of words learned per month.

3. Word-groups or phrases if used.

a) Kind,—name words, action words, poorly related words.

b) Easy to memorize,—involving repetition of same words, or use of words easily appealing to child, e. g. "ran and ran;" "cat and mouse;" example of poor word group for teaching found: "were there."

c) Length of phrases.

4. Sentences.

a) Length.

b) Natural or artificial in form. Example of poor form found: "One day his mother sent a boy to the store."

c) Full of meaning or nonsensical.

5. Gradation of Material.

a) Is gradation carried to all details of the system,—words, phrases, sentences, etc.?

b) Is the gradation subjectively or objectively developed? I. e., is it graded according to child's experience or according to arbitrary standards?

c) Is there gradation in the mastery of the material by the child? Is one thing mastered before another principle is taken up?

d) Is the drill work concentrated or miscellaneous?

6. Lesson Units.

a) How is the material divided? Is the division important?

b) Advisability of inter-connecting the stories in theme or content?

7. Word-markings.

a) Diacritical marks. Are they useful or necessary? If so, when? The first time a word is used, the first few times, or always?

b) Elision or crossing out of silent letters. Same consideration as for diacritical marks.

c) Division into syllables or phonic elements.

8. Illustrations.

a) Suggestiveness and appeal to child.

b) Relation to material to be read and drilled upon.

9. Supplementary Material.

a) Perception cards,—for phonograms, words, word groups, and sentences. Are they printed in print or script or both?

b) Outline pictures.

c) Charts. Size of type; kind of pictures, if any.

d) Teacher's manuals or editions.

(1) Suggestiveness in devices, games, songs, etc.

(2) Degree to which steps of work are clearly and fully outlined.

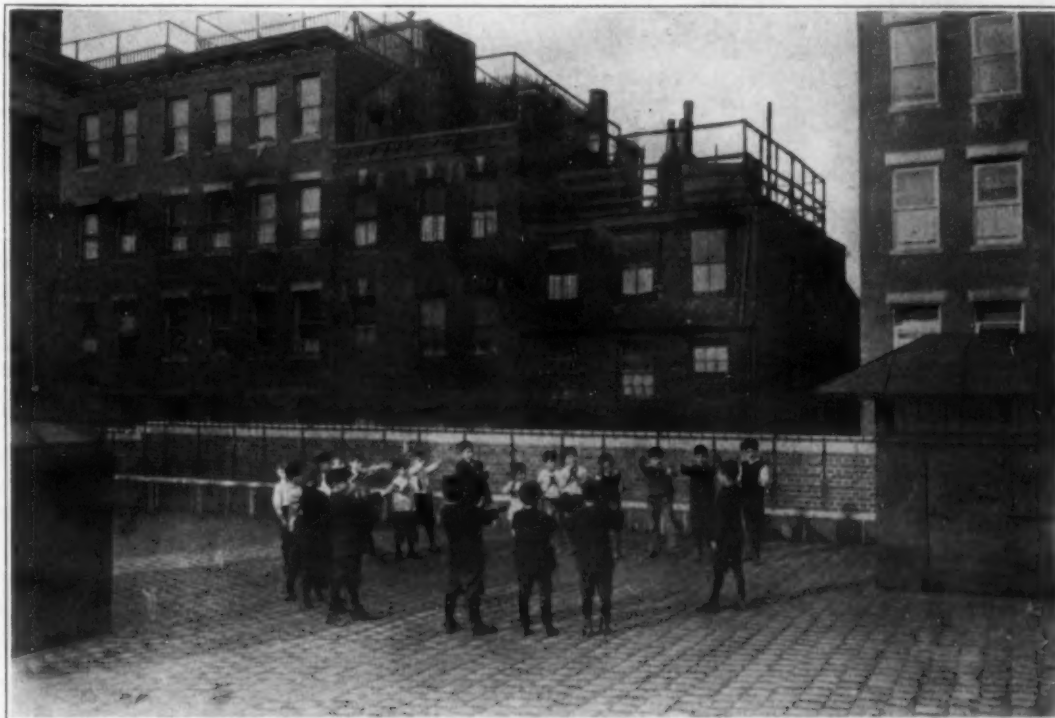
(3) Daily plan of work. An advantage or a disadvantage?

III. METHOD.

1. Fundamental types.

a) Alphabet system.

b) Phonic system or method. The sound as the unit. This method works from the part to the whole, the sound to the word and sentence. "It is mechanical, since the great majority of the sounds taught are not based upon thought symbols." "Any method which begins reading by teaching the child to examine each word, to analyze it into component phonograms, to sound each phonogram, to combine these sounds to get the word, places a premium on lip-movement and unnecessary audible aids, and promotes slow, ponderous reading, which develops into habits that defy later efforts at correction. Our objection to



WHERE GROUND SPACE IS PRECIOUS!
ON THE NEW PLAYROOF AT THE MICHAEL ANGELO SCHOOL, BOSTON.
IT IS FLOORED WITH HEAVY ROUGH FINISH TILING AND HAS A PARAPET ALL THE WAY AROUND,
GUARDED BY AN IRON RAILING THREE FEET HIGH. ON THIS THE LITTLE ONES CAN PLAY
SAFELY, WHILE OLDER CHILDREN CAN DURING THEIR PLAY HOURS PLAY
TAG, TOSS BALL AND OTHER GAMES.

synthetic methods—is that they manifest these short-comings." (Klapper — The Teaching of Reading).

c) Word or Eclectic Method. Based on the assumption that the word is the proper unit in teaching primary reading. Order of development: Word—phonic element—words—phrases and sentences.

d) Analytic Method. (Sentence Method) Based on belief that sentence is the unit of thought; that word is better understood when used in connection with full sentence. Phonics used only when they have a direct bearing upon some word difficulty. Order of development: Sentence—word and word group—phonic element—other words and sentences.

e) Thought-content Method. Variation of sentence method. Unit of work is the thought,—sometimes a sentence, sometimes a part of a sentence, sometimes more. Emphasis placed on content,—must have high literary value for child. Generally in primary work based on Mother Goose Jingles or certain standard stories closely related to the child's experience.

Order of development: Thought—word or word group—phonic element—other words—other sentences.

(In applying scale to this element, groups of teachers would probably assign certain values to systems following a certain method, and give the highest value to systems which they especially approved. Those following a method not approved by them, would be assigned lower values.)

2. Important Considerations in Methods.

a) Is the method *psychological* in its approach? Does it begin with a child's real unit of thought and build up from that. Important to determine from authorities what the child's unit of thought is. If it does not begin with the child's unit of thought, it is un-economical and must contend with a lack of inherent interest on the part of the child, and cannot therefore be considered psychological.

b) Is the method well recommended? Has it stood up well in actual classroom practice in other schools? For this information, it is needless to say, it is unwise to rely upon claims put forth by publishers for their respective systems.

c) Is the method one that requires a high degree of specialized skill on the part of the teacher or can it be learned and mastered by one not especially trained in that method?

IV. PHYSICAL MAKE-UP.

1. Size and shape of books.

a) Common sizes—5½x7½, 5½x7½, 6½x7½. Little or no choice so far as convenience is concerned.

2. Binding.

a) Color; important in showing signs of wear, and soiling.

b) Sewing. Depth to which sewing holds pages of book.

c) Re-enforcement of back.

3. Paper.

a) Surface,—glazed, smooth but unglazed, rough surface. Consider element of light reflection.

b) Strength,—tearing strength especially important.

c) Thickness,—important only in relation to strength or to the possibility of type showing through from opposite side of page.

4. Type or printing.

a) No universal agreement on exact size

of type for each year's books. Not only size, but also face of type is important. Primer should have much larger and plainer type than later books.

b) Spacing of type,—especially important in primers to space lines some little distance.

a) Clearness, especially in outline and crowded appearance.

5. Illustrations.

a) Clearness, especially in outline and in detail, so that child may easily relate picture to story.

b) Colored illustrations sometimes overdone. Brightness and richness of illustrations should not be such as to distract attention of child from significance of picture.

c) Illustrations should be natural and true to life. Presence of old cuts depicting scenes of former years instead of present day life is undesirable when story deals supposedly with contemporaneous life.

6. Table of Contents.

a) Important chiefly as an aid for the teacher in first year. May be worth while for children in other years.

7. Word list or glossary.

a) Important aid for teacher.

PROMOTIONS OF ELEMENTARY TEACHERS.

Bertha Y. Hebb, U. S. Bureau of Education.

An estimate as to how post-war elementary teachers are faring throughout the United States may be somewhat determined from an examination of the table presented below. This table gives the maximum and minimum salaries of elementary teachers in 89 cities, with population ranging from 30,000 to 175,000 for the fiscal year ending 1920-21, and of 71 of these same cities for the year 1912-1913. Upon comparison of the salaries for the two dates in question, it will be found that 31 of 71 cities have doubled, in some instances even trebled, the maximum salaries of their teachers since 1912-13; and that 55 cities have doubled, in some cases trebled and quadrupled, their minimum salaries since that date. Some of these generously appearing cities, however, it will be seen, were paying infinitesimally low salaries in 1912-13. Sioux City, Iowa, for instance, which has trebled her maximum, and which stands fourth from the highest paying cities upon the list, paid but \$675 per annum in 1912-13; and Portsmouth, and Richmond, Va., which have quadrupled their minimums, paid their beginning teachers but \$250 and \$195 respectively in 1912-13.

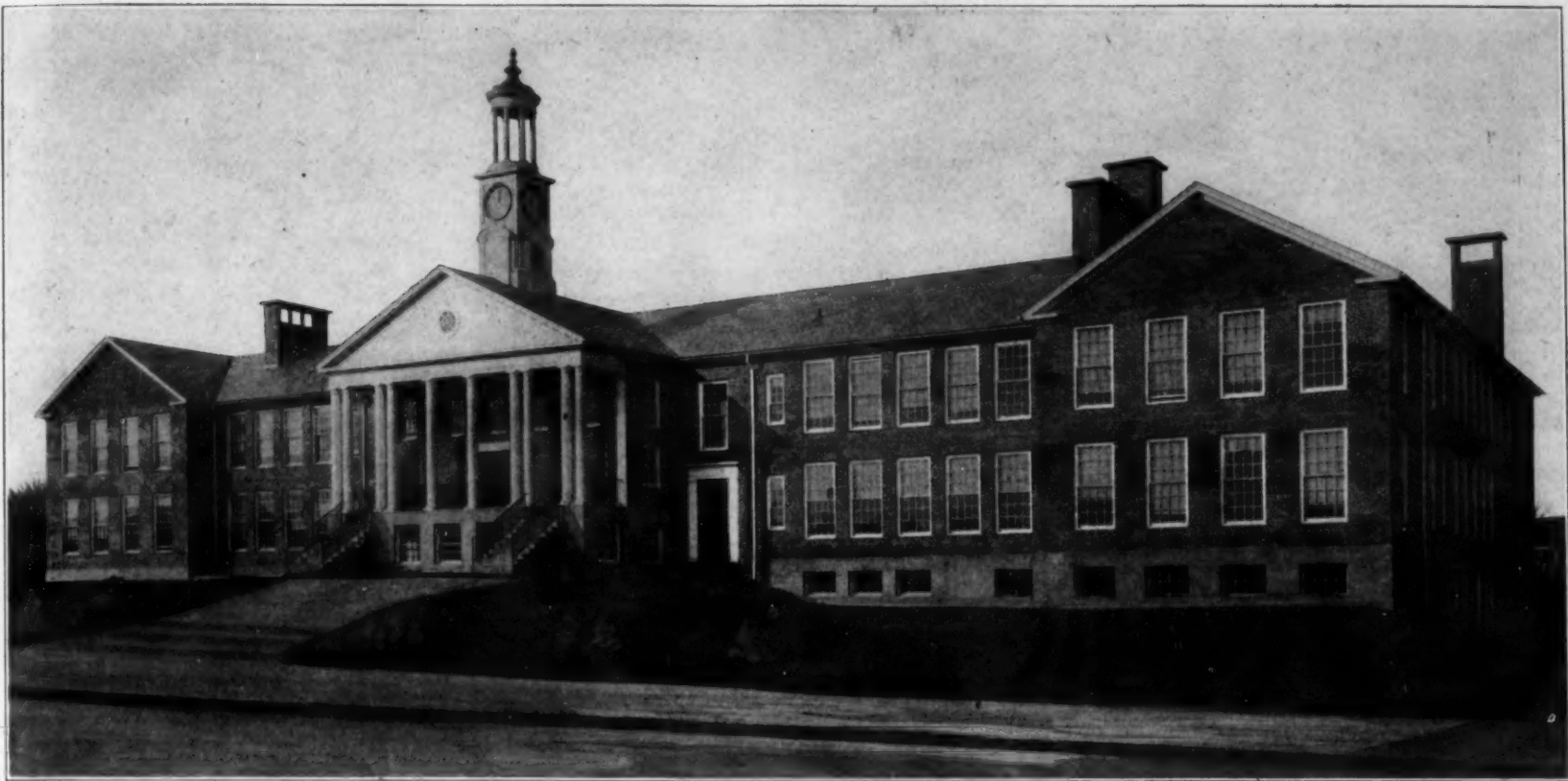
From some of the maximums for the fiscal year 1920-21, it might appear that elementary education is worth twice as much in some cities as in others. Bayonne, N. J., and Gary, Ind., for instance, paid their teachers \$2500 per annum for that year, while Charlotte, N. C., paid but \$1200. And the two first-named cities, it will also be noted, paid their teachers for the fiscal year 1920-21 almost twice as much as any one of 22 other cities upon the list of maximum salaries for that year.

Stockton, California, might also be named in connection with the cities standing at the very top of the list, for the reason that she paid her beginning teachers for the fiscal year 1920-21, \$1640 per annum, the highest minimum paid by any city upon the list.

The following is the table from which the above deductions were made. The blank spaces in the 1912-13 column do not indicate,

as some of the figures in that column might imply, that elementary teachers received nothing for that year—rather that the data were not available.

	Elementary ¹ Teachers. 1920-21.		Elementary Teachers. 1912-13.	
	Max.	Min.	Max.	Min.
Bayonne, N. J.	\$2500	\$1400	\$1200	\$600
Gary, Ind.	2500	1000	950	600
Hoboken, N. J.	2460	1200	1500	600
Mt. Vernon, N. Y. ..	2250	1250	1040	600
Sioux City, Ia.	2100	1320	675	540
East Orange, N. J. ..	2100	1300	1250	550
San Jose, Calif.	2000	1500	....	....
Butte, Mont.	2000	1400	....	....
Newton, Mass.	2000	1200	900	550
Bay City, Mich.	2000	1000	800	350
Passaic, N. J.	2000	1200	900	500
Brookline, Mass.	2000	1400	....	....
Stockton, Calif.	1920	1640	....	....
Berkeley, Calif.	1920	1500	1710	720
Sacramento, Calif. ..	1920	1320	1200	1080
Niagara Falls, N. Y. .	1900	1100	809	450
Fort Wayne, Ind. ...	1900	1200	800	455
Pueblo, Colo.	1900	1000	850	500
Holyoke, Mass.	1850	1550	....	....
New Britain, Conn. ...	1850	950	1350	400
San Diego, Calif.	1836	1300	1152	696
Allentown, Pa.	1800	900	....	....
Oklahoma City, Okla. .	1800	1200	....	....
Atlantic City, N. J. ...	1800	1200	975	550
Wichita, Kans.	1800	1200	675	450
¹ Most of the 1920-21 data were obtained from City School Circular, No. 1, U. S. Bureau of Education.				
Pasadena, Calif. ...	1800	1400	1100	550
Canton, Ohio	1800	1000	800	400
Long Beach, Calif. .	1750	....	1000	600
Racine, Wis.	1750	1100	....	....
Schenectady, N. Y. .	1700	1100	775	500
Harrisburg, Pa.	1700	900	760	380
Troy, N. Y.	1700	1100	700	650
Evanston, Ill.	1700	1200	950	650
Fitchburg, Mass. ...	1650	1050	....	....
Saginaw, Mich.	1650	1200	650	350
Davenport, Ia.	1650	1000	....	....
Duluth, Minn.	1650	1200	850	500
Oak Park, Ill.	1620	1000	1000	650
Hammond, Ind.	1642	1100	....	....
Kalamazoo, Mich.	1605	1200	900	420
Lincoln, Neb.	1600	1000	830	516
Elmira, N. Y.	1600	1100	600	400
Jackson, Mich.	1600	1200	650	500
Newport News, Va. ...	1600	1100	....	....
Wilkesbarre, Pa. ...	1580	750	750	400
Wheeling, W. Va. ...	1575	1045	850	495
Elizabeth, N. J.	1560	900	1000	450
Lansing, Mich.	1550	1100	600	400
Kenosha, Wis.	1530	1200	713	475
Portsmouth, Va.	1525	1000	650	250
Terre Haute, Ind. ...	1500	1000	800	540
Chelsea, Mass.	1500	900	800	300
Evansville, Ind. ...	1500	900	800	435
Johnstown, Pa.	1500	900	....	....
Peoria, Ill.	1500	630	....	....
Springfield, Ohio ...	1500	900	....	....
Norfolk, Va.	1500	1000	....	....
Everett, Mass.	1500	1000	700	450
Springfield, Ill.	1500	1000	800	450
Somerville, Mass. ...	1500	1000	775	500
Binghamton, N. Y. .	1500	1100	525	400
Perth Amboy, N. J. ...	1500	1000	950	500
Hamilton, Ohio	1500	700	1100	380
Jamestown, N. Y. ...	1500	1000	700	450
St. Joseph, Mo.	1470	800	810	450
Pittsfield, Mass.	1500	1000	760	400
Rock Island, Ill. ...	1500	1150	675	360
Col. Springs, Colo. .	1440	1080	960	600
Waltham, Mass.	1450	....	800	550
Brookton, Mass.	1440	1080	....	....
Richmond, Va.	1434	811	765	195
Beaumont, Tex.	1400	1100	675	405
El Paso, Tex.	1400	1000	810	360
Medford, Mass.	1400	....	750	450
Rockford, Ill.	1400	1000	750	400
Chester, Pa.	1400	900	618	380
Cicero, Ill.	1400	1000	850	600
Haverhill, Mass. ...	1400	900	750	400
Augusta, Ga.	1380	960	900	248
Lynchburg, Va.	1375	935	....	....
Oshkosh, Wis.	1375	1050	650	400
New Castle, Pa.	1350	850	630	414
Altoona, Pa.	1350	810	1035	405
Charleston, S. C. ...	1340	900	630	405
Salem, Mass.	1300	1000	700	500
Manchester, N. H. ...	1300	900	700	400
Knoxville, Tenn. ...	1260	675	665	238
Lancaster, Pa.	1250	800	750	400
Charlotte, N. C.	1200	765	540	297



BIRD SCHOOL, WALPOLE, MASS.

OLD NEW ENGLAND ARCHITECTURE
IN THE NEW BIRD SCHOOL,
WALPOLE, MASS.

Ralph Wells Westcott, Superintendent of
Schools, Walpole, Mass.

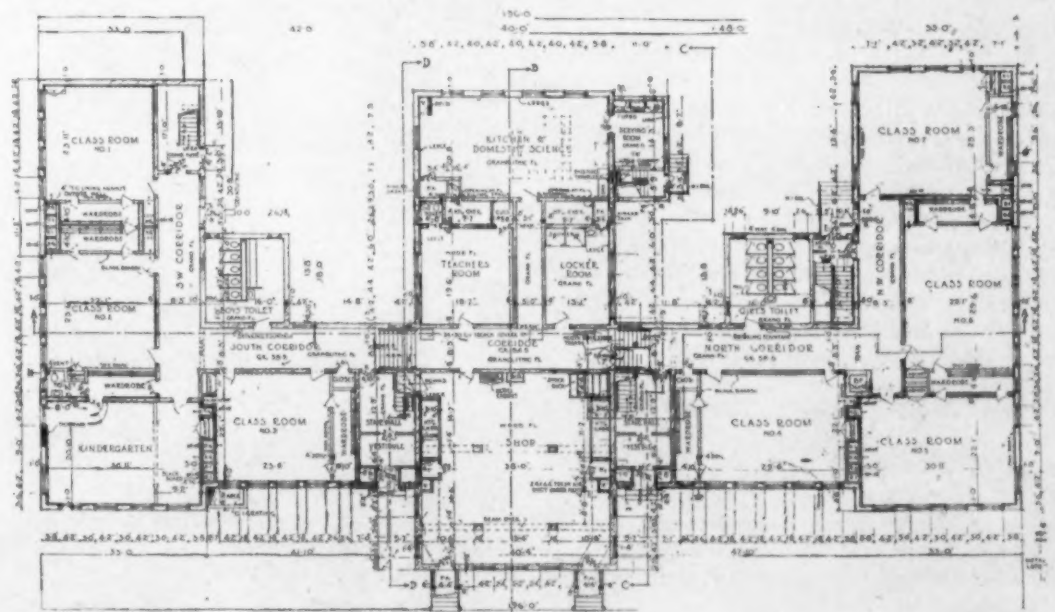
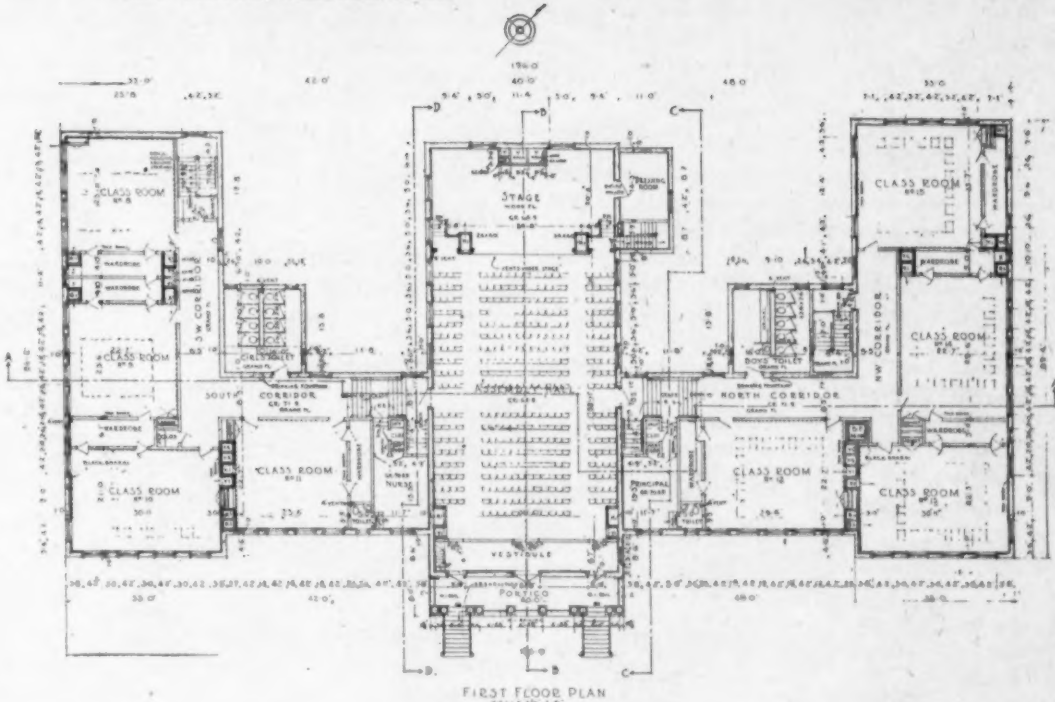
Walpole has long had a Bird School, named after the late Hon. Francis W. Bird, a prominent figure in New England. His son, Mr. Charles Sumner Bird, also of Walpole and well-known in the east, spoke at the recent dedicatory exercises of this new Bird School. This building replaces three old wooden structures, one of which dates back more than eighty years, and all three together long too small to accommodate the school children from this section of town.

The new school is devoted to all grades of pupils from the kindergarten through the junior high school. It is especially adapted for this purpose in its plan. The kindergarten is located but a step above the ground at the sunny corner of the building. The private entrance, toilet, and cloak room make this an ideal arrangement. The rest of this wing of eight classrooms is occupied by the children in the lower grades. The junior high school is located in the opposite wing, quite distinct from the rest of the building because of the arrangement of the central unit.

Here between the two wings are the assembly hall, balcony, and stage seating over five hundred people, the shop, kitchen, teachers' room, and showers. The auditorium is upon a level midway between the first and second floors of the two wings. This not only segregates the junior high school from the lower grades, but also makes the hall equally accessible to both floors in both wings. The auditorium is, then, a story and a half in height.

The building itself is an architectural gem as the photograph of the front elevation testifies. The simple, chaste lines are greatly enhanced by the beautiful pillars and clock tower at the main entrance. The architect, Mr. R. Clifton Sturgis of Boston, has taken the architecture of an old New England meeting house or of the Amherst College Chapel, now celebrating the centennial of its erection. Allow a few years for the bricks to mellow and the vines to climb and the building will be a fitting mate to its historic ancestors.

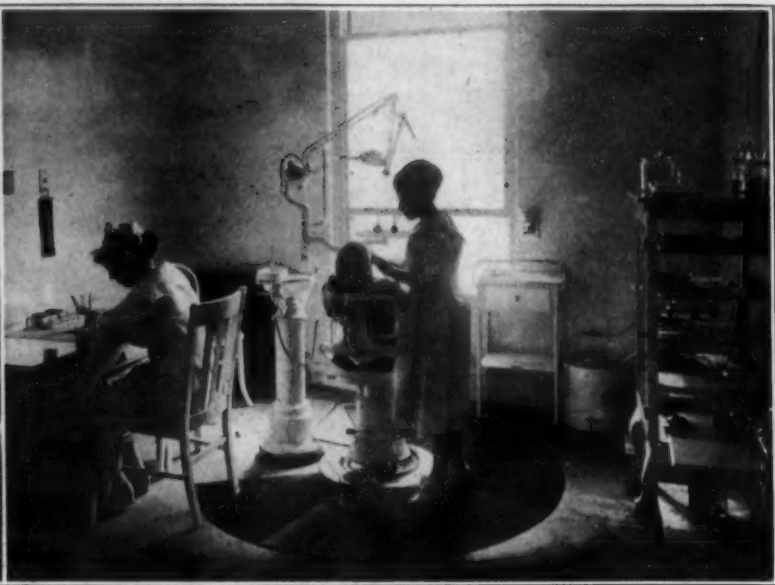
The classrooms are especially well lighted. The conventional blackboards cover the front



BIRD SCHOOL, EAST WALPOLE, MASS.
R. C. Sturgis, Architect, Boston.



UPPER GRADE CLASSROOM.



THE DENTAL CLINIC.

and side walls, but at the rear of each room is a tack board, a valuable educational feature. The coat rooms adjoin the classrooms and are under the direct care of the teacher. The toilets, too, are on the classroom floor levels, conveniently arranged for light, ventilation, and supervision.

The building is liberally supplied with exits—eleven single and one double. The state inspectors have readily granted permission to use the auditorium for public meetings while school is in session.

Two of the junior high rooms are shown in photograph. These are equipped differently from the conventional classroom with the expectation that they will help to carry out the idea of flexibility in the curriculum. The standard school desks are certainly not so well adapted to some uses as large library tables or assembly seats. The special needs of music, dramatics, small assemblies, parent and teacher meeting, etc., are well taken care of in the small hall. Likewise drawing, sewing, map work, encyclopaedia and dictionary study, basketry, etc., are taught better in the special room with the large library tables.

One of the best school dental clinics in the East has been equipped through the generosity of Mrs. F. W. Bird and her mother, Mrs. Phelps. It is complete to the minutest detail. The room is, of course, entirely in white. Chair, instruments, sterilizer, desk, filing cabinet, lavatory are all the very best that money can buy. In addition portable army equipment is at hand for the use of the dental nurse who makes her regular tours of inspection and cleaning to the other schools.

The building is of the so-called class B construction, and not absolutely fireproof. The corridors are all of concrete construction, and in the classrooms wooden floors have been laid upon reinforced concrete. The partitions are of brick and concrete, and lath wire, but the beams supporting the roof are wood. The building is heated by two large tubular steam boilers, running under low pressure, and ventilated by the gravity system. The building was heated through the worst of last winter with no difficulty. Temperature and humidity control has not been introduced yet.

The equipment of furniture has cost about \$9,000, but we have used considerable furniture from our old buildings, which we are discarding. The cost of construction of the heating and ventilation was about \$20,000.

The building was constructed under high labor and material costs and during the most severe winter Massachusetts has experienced in thirty years. In spite of that, through sheer good fortune in placing contracts, the building

was completed at a construction cost of about \$145,000, or about 28 cents per cubic foot. This is a remarkable figure for this part of the country with costs running about 50 to 55 cents per cubic foot at the present time.

Walpole is very proud of her new school building and of the fact that all but two of her schools are now of modern brick construction. It has cost money for a town of 6000 to build such schools and to pay high salaries to her teachers, as her 1921 tax (for education only) of over \$18 per \$1000 of valuation indicates. Progressive citizens know that they will have to stand firm to insure a continuance of this progressive policy in the future.

THE APPLICATION BLANK.

Albert Earley, Dean Atlanta University.
Atlanta, Georgia.

The usual application blank sent by superintendents of schools to persons applying to them for teaching positions contains questions relating to the candidate's education, experience, and such items as weight, height, health, and religious preference but it fails to show whether the candidate is an educational "progressive" or a "stand patter." The blank fails to show whether the candidate believes she has "stored up" enough training to last her the rest of her natural life or believes it to be her professional duty to regularly recharge her pedagogical dynamo.

Believing thoroughly that no normal or college training, however complete, can be intellectual perpetual motion and desiring to secure teachers whose records and habits indicate that they will not become "moss backs" in our system, we ask prospective teachers, in addition to the usual questions, the following:

How many books have you in your private library?

How many of them are professional books?

Of what teachers' associations are you a member?

How many educational meetings, other than local, have you attended during the last three years?

If you have been teaching three or more years, approximately how much have you spent yearly to keep abreast of the times in your work?

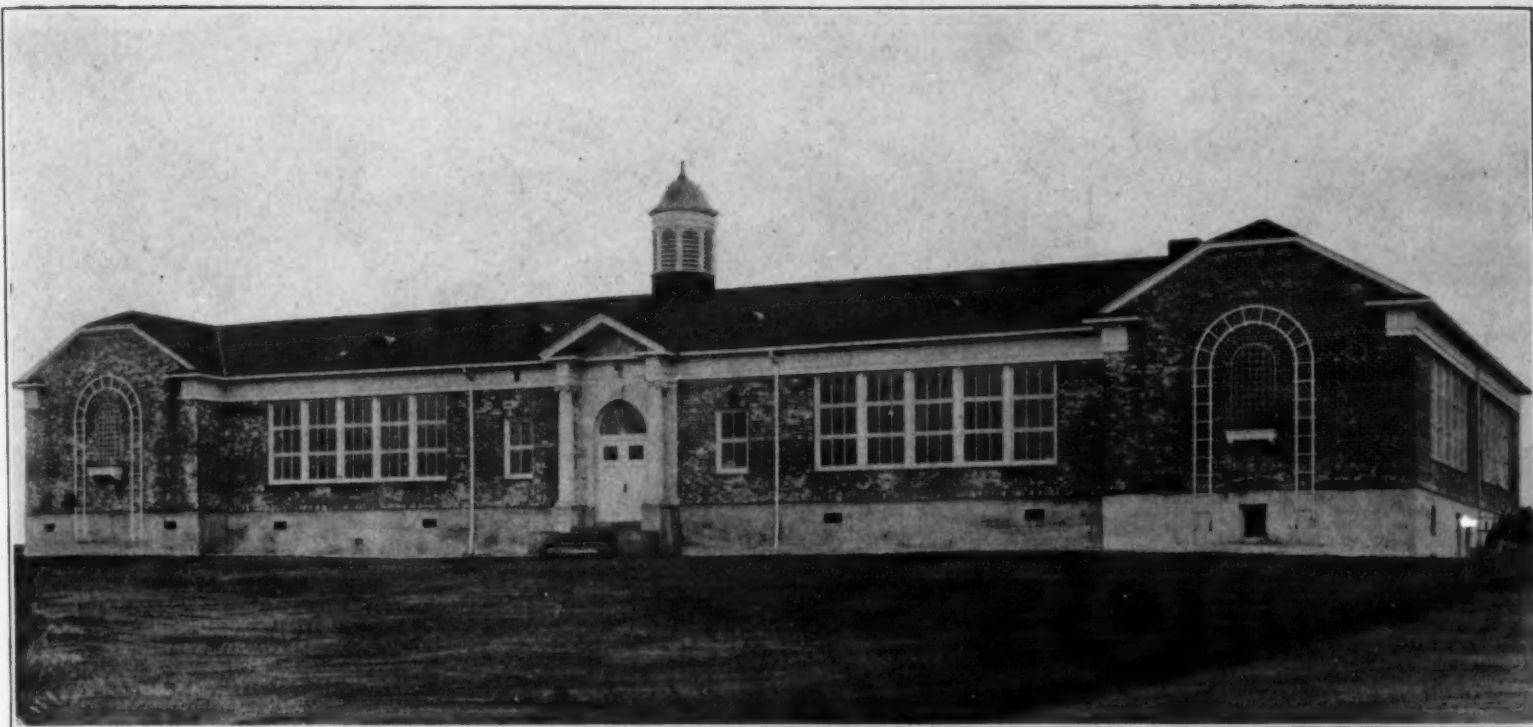
For what magazine do you subscribe?

Mr. Superintendent, do you want in your school system a teacher who never buys a professional book or who never subscribes for a professional magazine? Do you want one who is not a member of any teachers' association? Do you wish to employ a candidate who admits on her application blank that she never goes to any educational meeting except the local teachers' meeting which she is compelled to attend? Do you want anyone who does not spend a reasonable sum to keep in the main educational currents?

(Concluded on Page 139)



ERWIN GRADE SCHOOL, ALDERWOOD MANOR, WASHINGTON.
Stephen, Stephen & Brust, Architects, Seattle, Wash.



ERWIN GRADE SCHOOL, ALDERWOOD MANOR, WASHINGTON.

Some Interesting Schoolhouses in the State of Washington

Selected from the Work of Stephen, Stephen & Brust, Architects

The state of Washington presents to the students of educational administration many interesting situations which the older eastern states have never been confronted with. Sections of the state are relatively old, entirely stable in agricultural production and population; sections are entirely wild mountain and forest country to which the pioneer must still come; and other sections are undergoing rapid settlement and almost overnight are changing from cut-over forest land to closely populated fruit and farm districts.

There are in the state a progressive spirit, an absence of precedent and an eager, open-minded, and generous attitude toward education which help solve many difficulties that would be practically insurmountable in the extreme east. Thus the problem of housing the newly established and rapidly growing schools has been attacked with vigor and liberality from the financial side, and with a knowledge and an understanding of the best principles and the most approved practice of the older states. It is possible to find in the most distant sections of the state school plants that are so modern and complete that comparison with the newest schools in the east is not willingly made by the outside visitor.

A group of interesting schoolhouses erected in some of the fertile valleys of the Puget Sound country are presented in these pages. They are the work of the Seattle firm of architects, Stephen, Stephen & Brust, who have done much schoolhouse work in the state.

The Erwin Grade School.

The Erwin Grade School is an interesting type of one-story building, designed to meet fully current needs of a rapidly growing school district and to afford the greatest possible expansion without interference with the original structure.

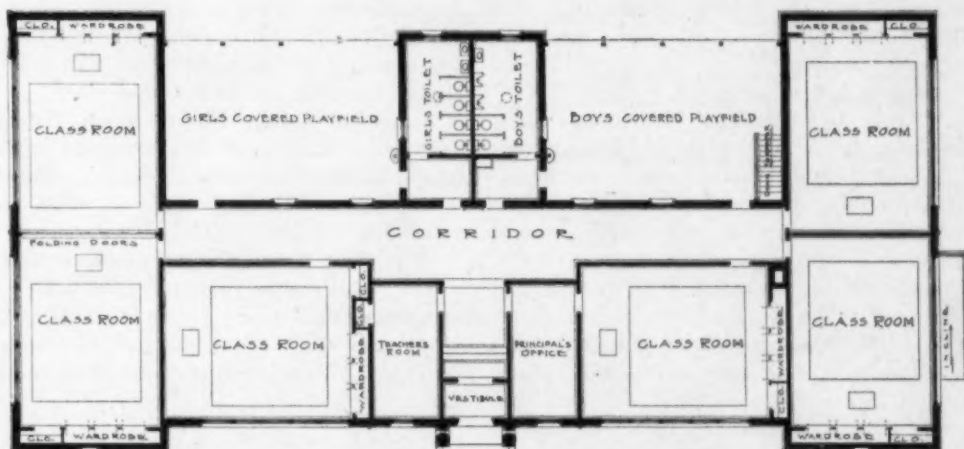
The building is located in Alderwood Manor, a section of School District No. 15, Snohomish County, Washington. This is a project of the Puget Mill Company and consists of several thousand acres of land which have been logged off and which are being settled on a unique plan

arranged by the original owners. In three years the school population has grown from an enrollment of about thirty to nearly two hundred.

The Erwin School which was completed in 1920, was fully occupied on the day it was opened. The district is continuing to grow so

that the building will shortly be increased in size or a new structure erected.

At present the building includes six standard classrooms, each arranged with a teachers' closet and a wardrobe. Adjoining the front entrance, there is an office for the principal and a retiring room for the teachers. Between the

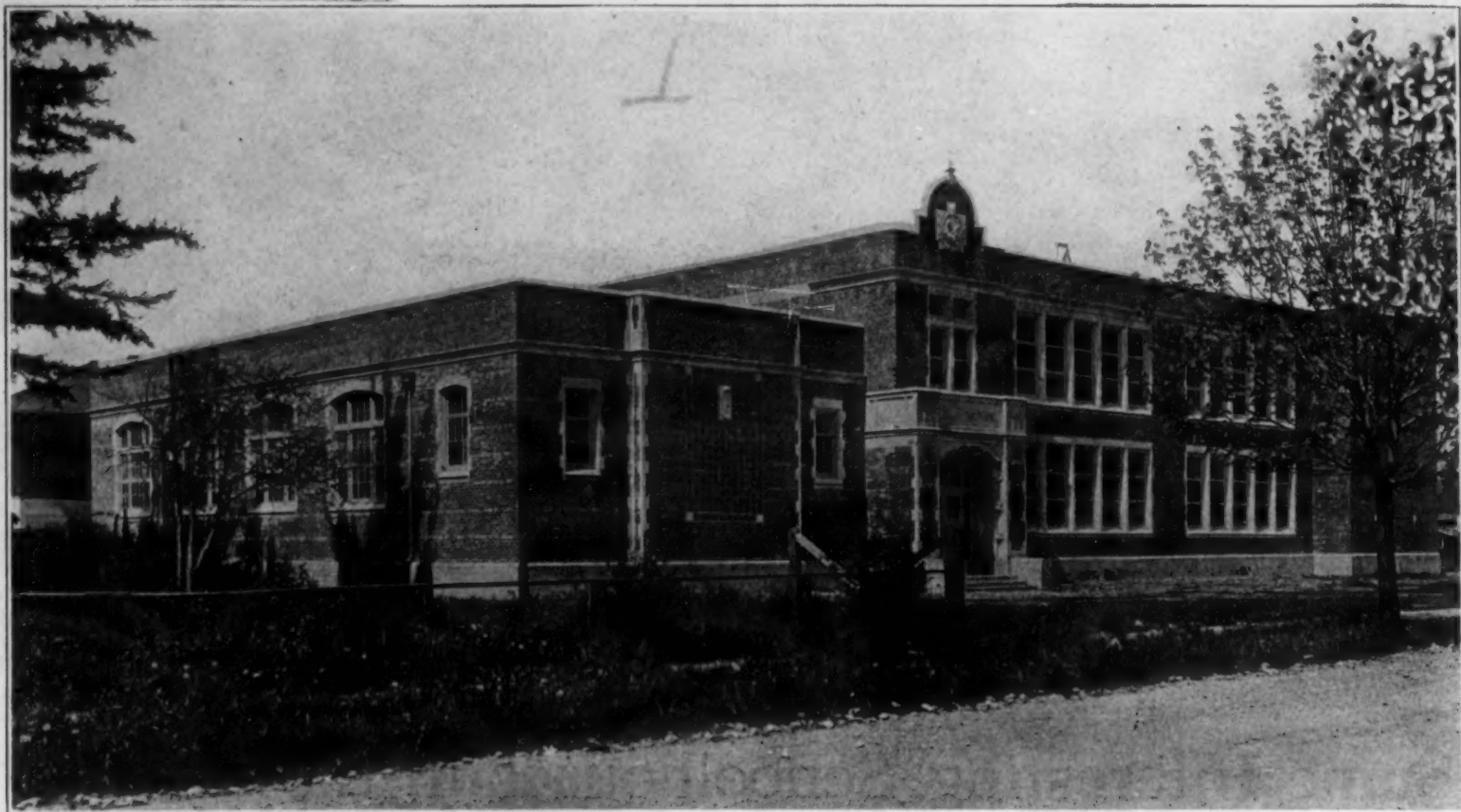


GROUND FLOOR PLAN

ERWIN SCHOOL, ALDERWOOD MANOR, WASH.
Stephen, Stephen & Brust, Architects, Seattle, Wash.



REAR VIEW, SHOWING PLAY SHEDS, ALDERWOOD MANOR SCHOOL, EVERETT, WASH.



NORTH BEND GRADE SCHOOL, NORTH BEND, WASH.
Stephen, Stephen & Brust, Architects, Seattle, Wash.

toilets and the two rear classrooms there are covered playsheds for boys and girls. These are necessary in the Oregon climate where the winter season brings on a long continued rainy period.

Two of the classrooms are separated by means of Wilson sliding doors so that they can be opened into one large room for assembly and community purposes.

The building is designed in the Colonial style to harmonize with the prevailing type of homes in the community. The cost of the structure was \$30,000 complete.

The North Bend Grade School.

The North Bend Grade School has been planned to meet an interesting problem and exhibits a careful study on the part of the architect, to meet local conditions and to adapt the structure to community as well as educational interests.

The building is located directly across the road from the North Bend High School, of which an illustration appears on this page, and forms an educational unit with the latter.

The building is constructed of brick with cast stone trimming. It contains eight standard classrooms, a teachers' room, a small library and an auditorium. The administrative office of the principal is placed on the second floor, immediately above the front entrance.

The plan is straightforward and has been very carefully studied to give ample exit space and to provide for excellent lighting of the wide corridor. The auditorium of the school seats four hundred and is intended not only to serve for the pupils in the grade school but also for the students of the high school who are located in the building across the road.

Since the photograph was taken the grounds have been landscaped to correspond with those of the high school building.

The structure was erected in 1920 and cost \$62,000.

The North Bend High School.

The North Bend High School which forms an educational merit with the North Bend Grade School, was erected in 1916 at a cost of \$30,000. The original enrollment permitted the

use of one of the classrooms for study purposes but at present the assembly hall on the second floor is used for study and for general school exercises.

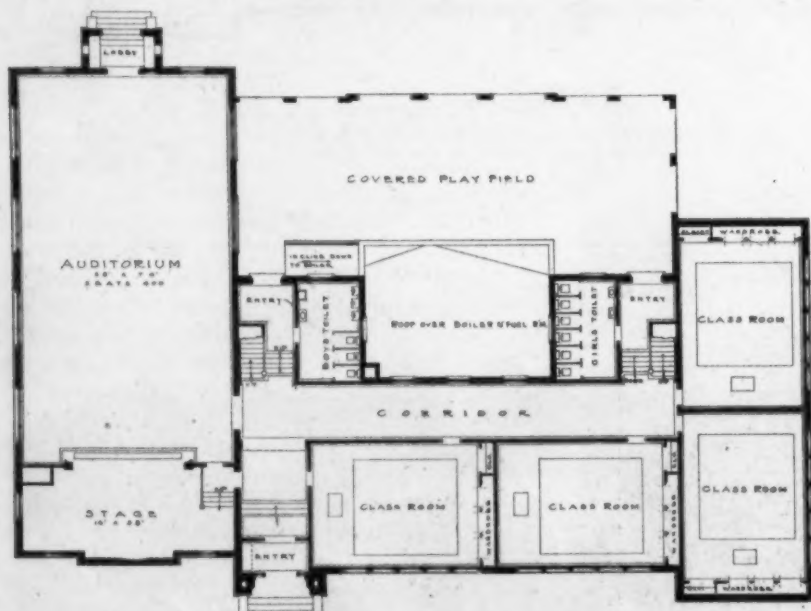
An interesting feature of the school is the splendid care given to the grounds. The entire site has been carefully worked out by a landscape man, and the lawn, as well as the shrubs and trees, are given systematic attention.

The school is in the center of a large, prosperous lumbering and dairying district.

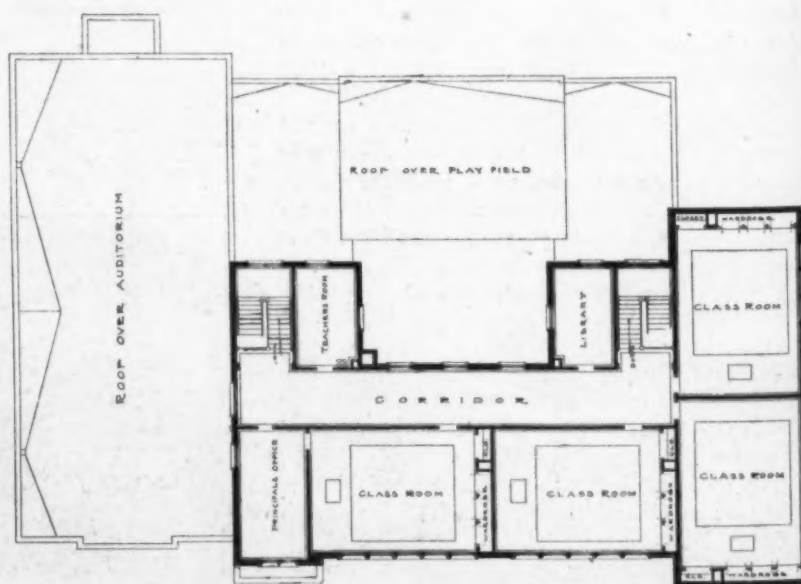
The Vancouver High School.

The Vancouver High School was erected just before the war at a cost of \$105,000. It houses a complete high school of standard type in one of the oldest, if not the oldest, towns of the state, and has been found a practical building in use.

The structure contains in the basement gymnasium, manual training and domestic science rooms, space for the heating and ventilating apparatus, and service rooms for the physical training and shop departments. The



FIRST FLOOR, GRADE SCHOOL, NORTH BEND, WASH.
Stephen, Stephen & Brust, Architects, Seattle, Wash.



SECOND FLOOR, GRADE SCHOOL, NORTH BEND, WASH.
Stephen, Stephen & Brust, Architects, Seattle, Wash.

heating system is of the steam plenum type, with automatic temperature control.

The first and second floors are occupied by classrooms, laboratories, recitation rooms, teachers' retiring rooms, an office and an auditorium seating 700 persons.

The exterior of the building is finished with a warm red brick, trimmed with granite terra cotta. The design is of straightforward solid type and ample provisions have been made for enlarging the building to take care of increased enrollment. The grounds are now splendidly landscaped.

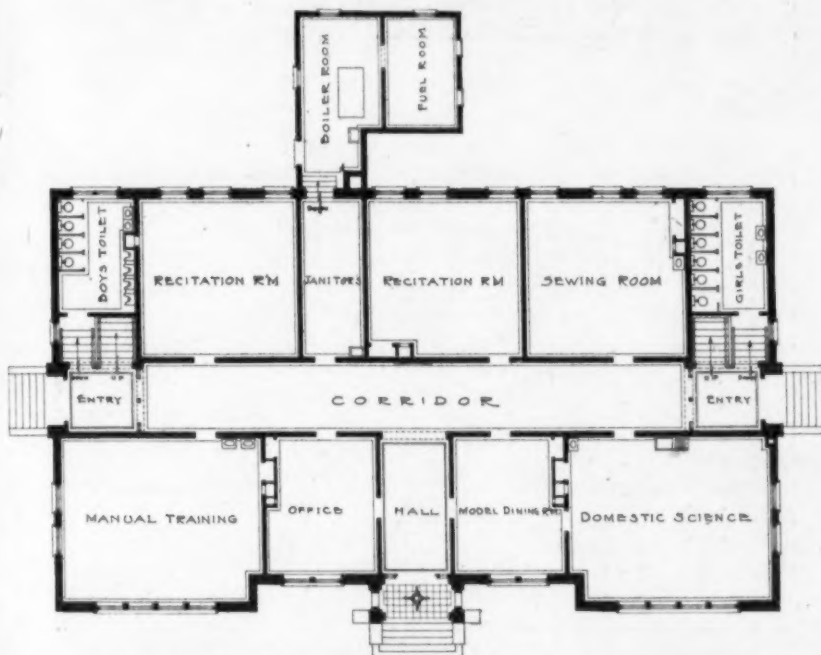
When the building was first completed the enrollment was 400 students. At present the building comfortably takes care of more than 800 students.

The Edmonds High School.

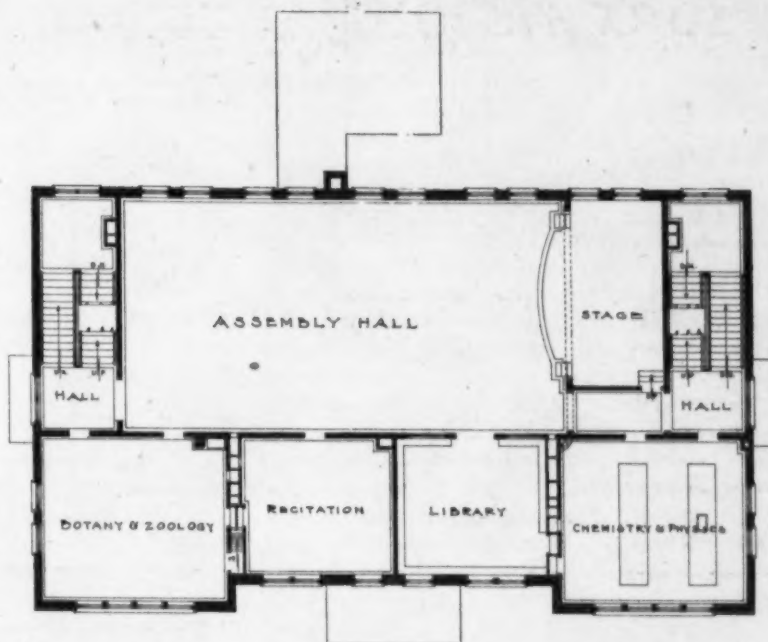
The Edmonds High School is the educational center of School District No. 15, a rapidly growing strip of land, of which the town of Edmonds is the center of business and population. The building was originally planned and erected by Architects Stephen & Stephen in 1910, and while the plan provided for the addition of wings at each end, the growth was so much larger than was anticipated, that the ori-



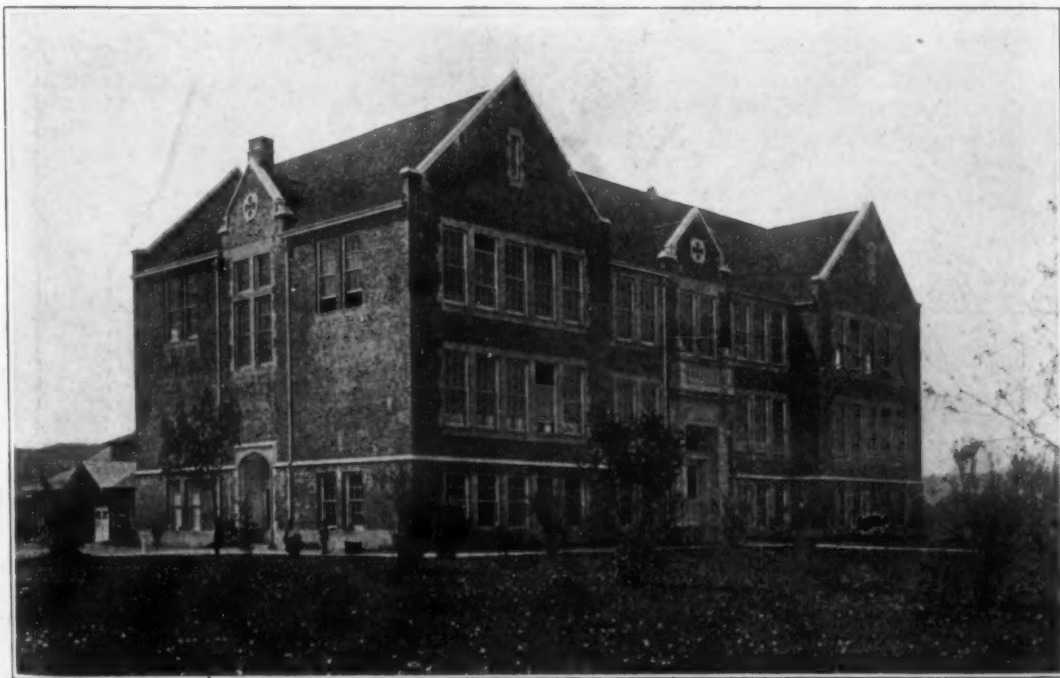
HIGH SCHOOL, NORTH BEND, WASH.
Stephen, Stephen & Brust, Architects, Seattle, Wash.



FIRST FLOOR PLAN, HIGH SCHOOL, NORTH BEND, WASH.
Stephen, Stephen & Brust, Architects, Seattle, Wash.



SECOND FLOOR PLAN, HIGH SCHOOL, NORTH BEND, WASH.
Stephen, Stephen & Brust, Architects, Seattle, Wash.



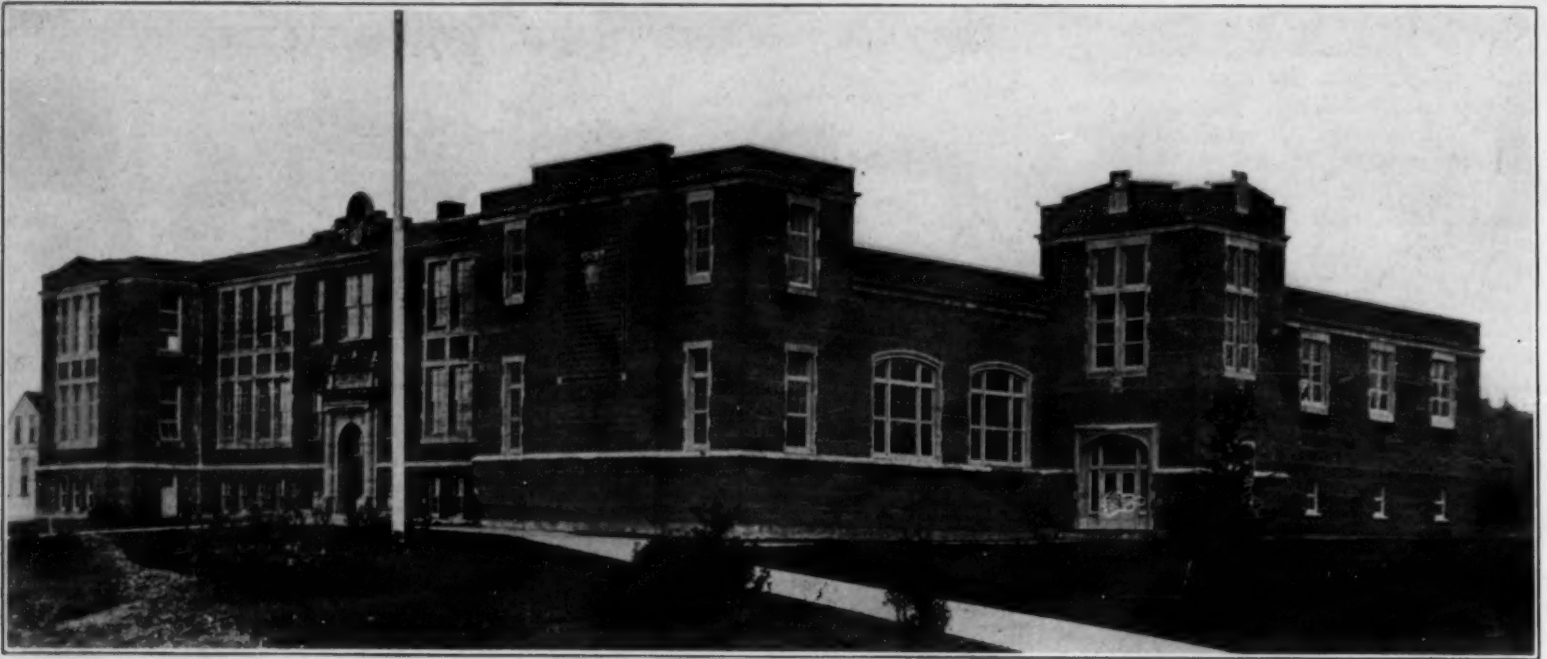
FALL CITY SCHOOL, FALL CITY, WASH.
Stephen, Stephen & Brust, Architects, Seattle, Wash.

ginal drawings were abandoned and an entirely new scheme of additions was worked out. The accompanying plans show in the middle, in the unshaded parts, the original structure, and at the sides, in solid lines, the additions.

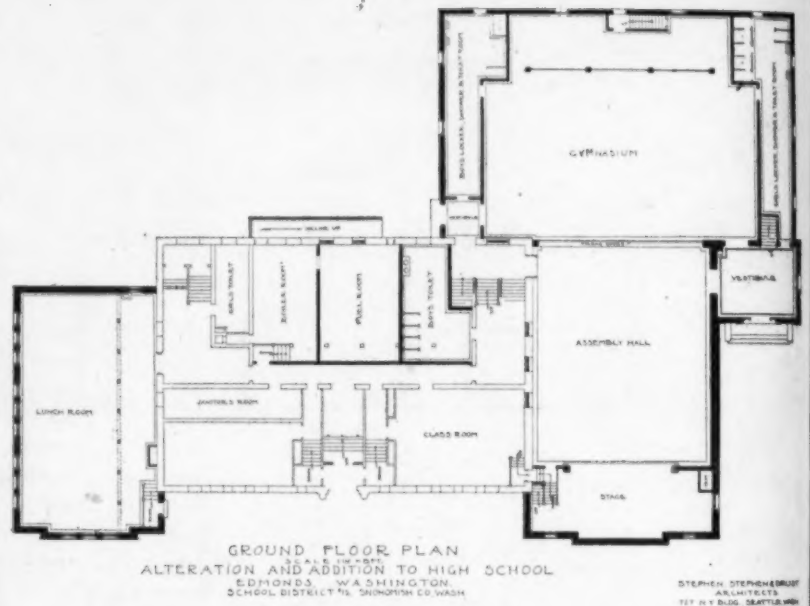
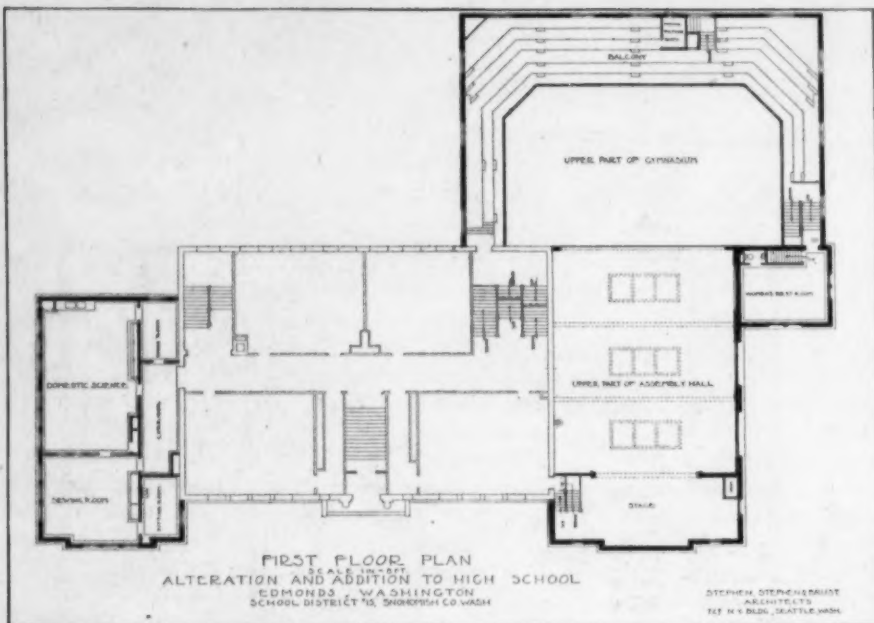
The old building contained seven classrooms and a laboratory. These facilities have been allowed to remain practically unchanged.

The additions provide, in the basement of one wing, for a lunch room; on the first floor for the household arts department, and on the second floor for an additional classroom and a commercial department.

The wing on the opposite side of the building provides space for a large assembly hall and for a splendid gymnasium. The latter is separated from the assembly hall by means of a Wilson sliding door 41 feet wide and 17½ feet high, which makes it possible to turn the two rooms into one when needed for full meeting purposes. The assembly hall and the gymnasium have separate outside entrances so that they may be used by the community independent of the balance of the building. The auditorium seats 300 persons and the gymnasium balcony seats 500.



EDMONDS HIGH SCHOOL, EDMONDS, WASH.
Stephen, Stephen & Brust, Architects, Seattle, Wash.



The additions to the building which were erected in 1920 cost \$75,000 complete. At present the building houses a complete high school and provides all the facilities for it, except for manual training which was taken care of in a separate frame structure.

The Chimacum School.

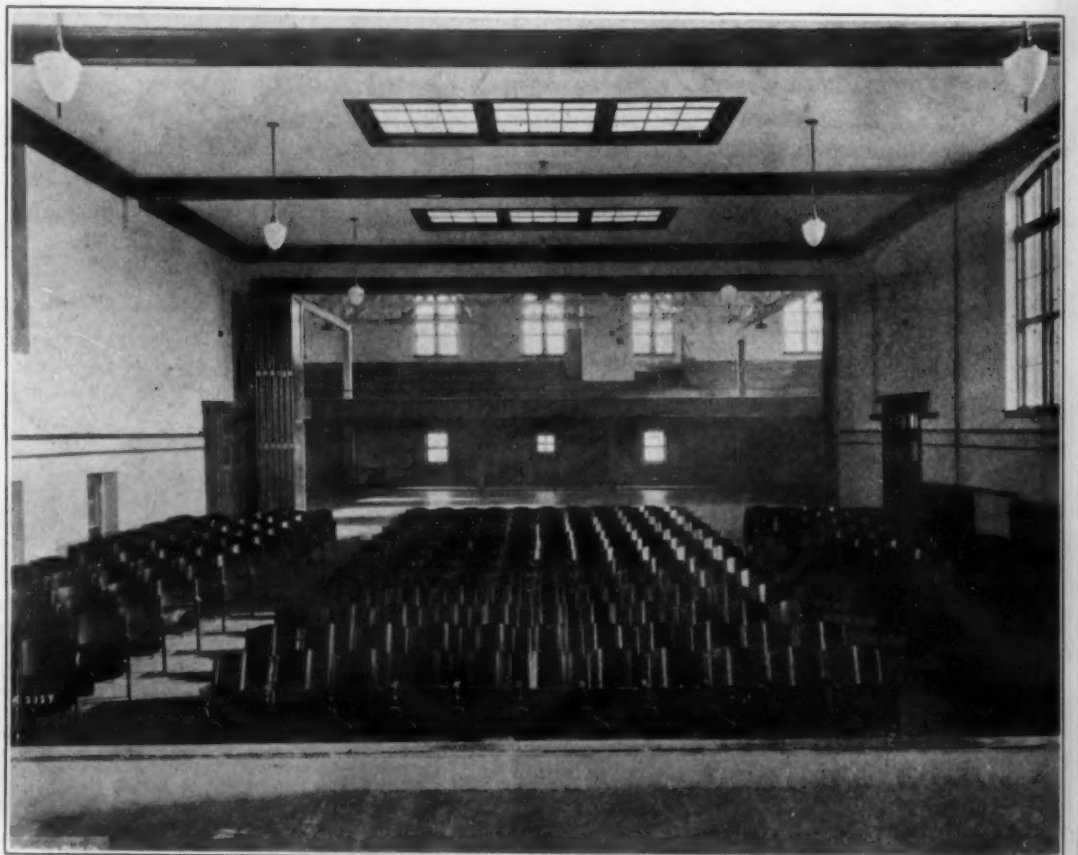
This interesting one-story school is located in the center of a rich dairy and farm section which is rapidly growing. The building is one of the largest one-story schools in the state and houses a complete grade school, as well as a high school. At present the building includes six grade classrooms, a library, two recitation rooms, an office for the principal, a dining room, a cooking laboratory and a sewing room. The assembly hall serves both for the grades and the high school.

The Fall City School.

The Fall City School is an interesting consolidated school, which serves a large farming and lumbering district. The second floor is given entirely to high school use and the first floor is devoted to the use of the grades. In the basement are located the shops and the domestic science department.

The gymnasium is located in a separate frame building, at the rear of the main school. On the same grounds with the school, there is a complete four-room cottage for the principal.

The school building proper is constructed of brick and hollow tile and has terra cotta trimming.



AUDITORIUM AND GYMNASIUM—DOORS OPEN. EDMONDS HIGH SCHOOL.
Stephen, Stephen & Brust, Architects, Seattle, Wash.

TEACHERAGES.

John C. Almack, Sanford, Calif.

A recent report of a committee of a state teachers' association recommends teacherages. More than one ambitious candidate for political honors in the educational field comes out strongly for teachers' houses in his platform. Institute lecturers emotionalize over the subject; educational magazines give it valuable space; and normal school rural departments sometimes devote a week to its study.

Now this is all good. But there is another side to the problem worth mentioning, that may keep it from being a problem at all, or show clearly that the teacherage is not the solution.

First, rural life has changed decidedly the last ten years, and the process is continuing; in fact it is just getting momentum. The old isolation is ended; distance has been annihilated. The causes of these changes are few; mainly specialized agriculture, good roads, and automobiles.

Community life has consequently developed. Many farmers live in town, often in hotels, and motor back and forth to the farms, even coming into town for lunch. It is a different thing to confine one's attention to one thing only such as raising Bartlett pears, alfalfa, peanuts, or Leghorn chickens than old time practices when everything was produced on the farm. Organization is different; combinations are beginning; the farmer is a first class business man.

How is all this connected with teacherages? It means that the one room school is disappearing, and as the movement gains headway it will vanish pretty fast. Furthermore, the ever-present jitney makes it possible for the teacher to live in town (and a teacher is a social individu-



HIGH AND GRADE SCHOOL, CHIMACUM, WASH.
Stephen, Stephen & Brust, Architects, Seattle, Wash.

al), and without loss travel back and forth to her school. And, though this seems incredible, many rural teachers actually possess their own cars, and can ride back and forth to their work with quite as much distinction if not comfort as a banker. The teacherage will soon be no longer needed.

This is not the real reason for its passing. The thing is simply impossible. Most of the teaching in rural schools, and especially in the very rural communities where the teacher finds it hardest to get a good home, is done by young

girls just out of normal or the high school training class. These girls cannot keep house alone in a teacherage. A little thought will tell anyone why they cannot; a little experience and observation will prove doubly convincing. There will be a long line of deserted teacherages in this country if the construction continues, though possibly they may be reverted to other uses, and thereby something salvaged.

THE INITIAL STEP IN SCHOOL ARCHITECTURE.

Desirous of proceeding along safe and proper lines in securing a new school building, an Ohio school board invited the judgment of a recognized authority on the subject. The answer was as follows:

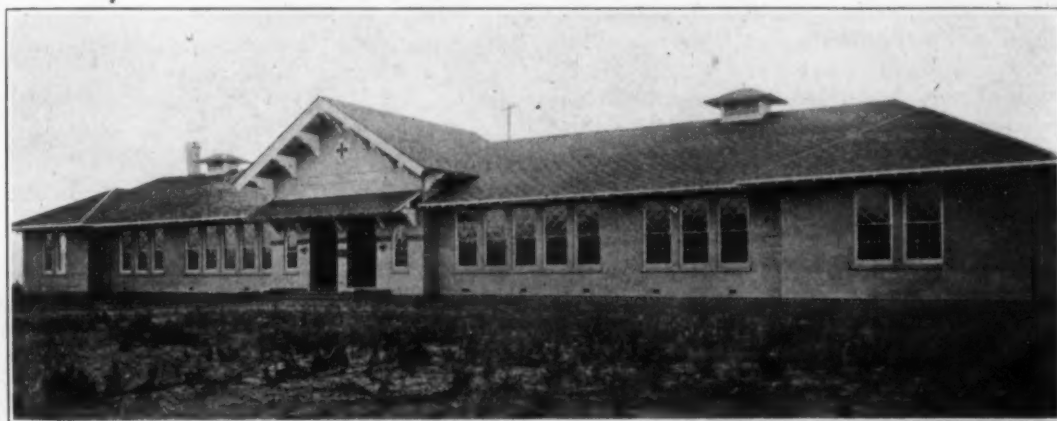
"The most helpful thing which we could say to you as a result of all our experience in school work, and every other kind of work in the building line, is this—that we recommend that your building committee as its first act in relation to this building project select an architect.

"We are aware that there is apt to be an impression that the first step in all building projects is for the owner, or the building committee as the case may be, to set about selecting a plan for this proposed building, but this is just where your architect can be most helpful to you. This is primarily what the architect is for.

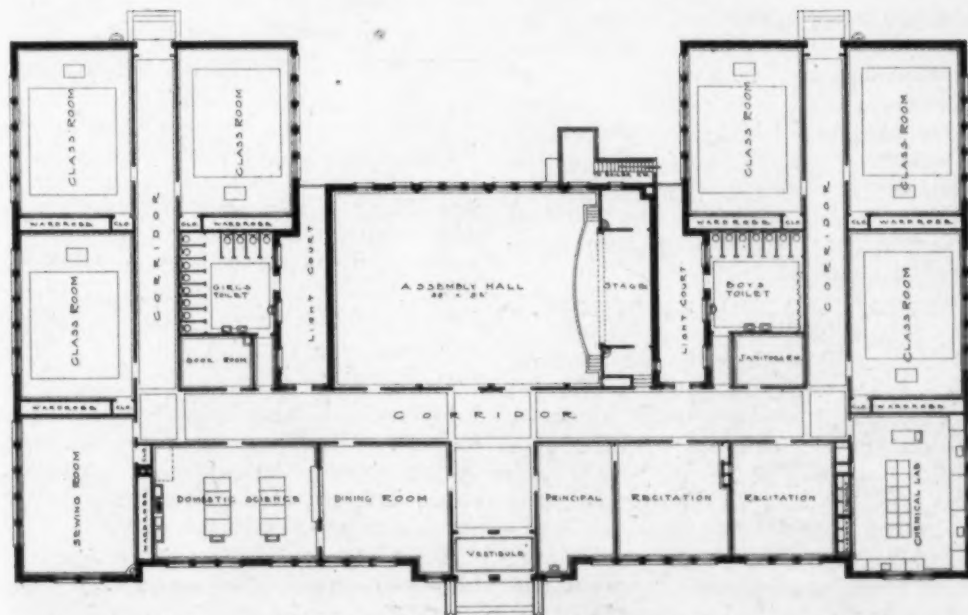
"An architect is not only a technically trained man who can interpret the owner's ideas in terms of materials so that the builders can estimate and construct the building, but he should enter into the very fundamental principles of the building as it relates to the site, the population which it is to serve, the peculiar social conditions prevailing and the administrative and educational methods which are to be used in the building.

"If you do not get your architect in consultation at the point where all these elements are to be co-ordinated into your building, then you will miss one of the most important parts of the architect's professional assistance and advice. In other words, you cannot select your architect too early in the game.

"The best way to select an architect is to choose one who has successfully solved the problems of other school boards and one who has the best all around experience in educational work, and then taking him into your confidence, tell him all of your troubles, and you are on the road to a successful consummation of your project."



HIGH SCHOOL, VANCOUVER, WASH.
Stephen, Stephen & Brust, Architects, Seattle, Wash.



FLOOR PLAN, GRADE AND HIGH SCHOOL, CHIMACUM, WASH.
Stephen, Stephen & Brust, Architects, Seattle, Wash.



THE AMERICAN School Board Journal

WM. GEO. BRUCE { Editors
WM. C. BRUCE }

EDITORIAL

PROFESSIONAL MEN AND BUSINESS ENTERPRISE.

Every profession has a business side and every professional worker has to deal in some manner with finances of a personal nature. His income is subject to disbursement. The margin between the two constitutes the saving. Out of this saving must come that competence that shall afford protection against possible privation and the vicissitudes of old age. No man can safely remain unmindful of the economic considerations which here come into play.

The surplus earnings may purchase a home, go into stocks, bonds or other forms of investment. Sometimes the savings go into safe investments and sometimes they go into wildcat schemes. The schoolmaster has proven himself as gullible as the average small investor.

There are, however, schoolmasters who seek investments in local financial industrial and commercial enterprise. Their number is growing. The tendency is gratifying.

There is no good reason why the schoolmaster, if he possesses the means, should not become financially interested in local business enterprise. In fact, there are some cogent reasons why he should. Being identified with local commercial or industrial undertakings, and thus in closer touch with the material progress of his community, he may also thereby become a better schoolmaster. Contact with business mortals can only widen and strengthen the professional horizon as far as this may apply to the subject of education.

Again, the schoolmaster who accepts a directorship in a bank, a commercial house, or an industrial enterprise does not impair his standing in the community. He should have the same privilege that is accorded to the lawyer or the physician to participate in the economic progress of the community. If the merchant can become a stockholder in a bank why not the schoolmaster? If the manufacturer can become a director why not the school superintendent?

In matters financial the theoretical knowledge of the professional man may prove a valuable addition to the practical knowledge of the business man. The schoolmaster should consider himself a free citizen who has the right and privilege to invest his surplus savings and spare time as he may see fit. The same opportunities that are open to other professional men to become identified with local business enterprise should be open to him. Why not?

WHERE IS THE BUREAU OF EDUCATION?

The American citizen who goes to Washington to see what Congress is doing, and incidentally to rejuvenate his patriotism and to watch the political trend of the nation, may in the course of a week's sojourn get a vague notion that, besides maintaining war and treasury, agricultural and commerce departments, and

innumerable bureaus, the cause of education must be receiving some consideration somewhere.

But, where among these stately governmental buildings, which loom up on all sides, is the home of education? Where is the United States Bureau of Education? The hotel clerk does not know. How should he know when there are so many dinky offices and bureaus and things? No man can be expected to keep track of all these minor agencies at the seat of government. Consult the telephone directory. Here it says that the Bureau of Education is located on F. Street, between Fourth and Fifth Streets (Pension Building). Well, there is some comfort in the thought that "Education" is at least housed somewhere, even if it is only in the Pension Building. And you go to the Pension Building to find the United States Bureau of Education.

You will find it all right, and something besides! A monster structure, with a cathedral-like interior, originally built to accommodate presidential inaugural balls, greets you upon your entrance. The dance plaza is now partly covered with book cases. Another corner of the ballroom floor is covered with restaurant tables and chairs.

In this huge hangar you grope about and find that in the darker recesses to three sides a series of pension offices are lodged. The series of book-cases, arrayed like a company of soldiers, are filled with textbooks. Behind these books you will find the bureau and its habitues. In fact, the whole United States Bureau of Education is found in the wing behind the schoolbooks.

As you pass along a row of open stalls you will find the educational experts, Dr. Deffenbaugh in one of them, and Dr. Bonner in another. The ceilings are high and the meagre light which comes in through the side windows must not be obstructed by partitions and walls. It must relieve the gloom of the spacious ballroom floor. Hence, the workers have as much privacy as have the fish in a public aquarium.

It certainly requires some concentration to do the painstaking work assigned to the personnel of this important government bureau. It will also require a coal miner's lamp for every attendant who attempts to find a book or document in the mausoleum-like region in which the book-cases are stacked.

Some years have passed since Dr. Wm. T. Harris was housed with the bureau in a small building. Since then new buildings have been erected for the accommodation of the government's business. The Department of Commerce, which stands in no different relation to the nation's business activities than does the Bureau of Education to the educational efforts of the country, is housed in a magnificent office building. Education deserves no less a housing than does commerce.

There is much in Washington to impress the citizen with the efficiency of government and to instill a regard for the forces that make for the nation's progress, but no one can become elated over the attitude that is manifested towards the nation's educational bureau.

PROPOSED TAXATION OF SCHOOL BONDS.

The Secretary of the Treasury, Hon. Andrew W. Mellon, has given his approval to a proposed amendment whereby all government securities, national, state, county and municipal are to be subjected to taxation.

His attitude is based upon the statement that the tax exempt securities now aggregate something like \$16,000,000,000, and are about equally divided between the national government and the states, counties and local units, and that the federal government is deprived of a large revenue because of the exemption from taxation.

It is also claimed that the investment of capital in tax exempt government securities has the tendency to divert such capital from railroads, public utilities and other industrial enterprises now sorely in need of the same.

"Furthermore, the bonds for the erection of a schoolhouse or the building of a highway, represent capital employed temporarily, and therefore unproductive," said Congressman Fadden of Pennsylvania, in defending the proposed amendment.

The arguments here advanced seem most plausible, but are based upon an economic fallacy. If it were within the scope of a school administrative journal we should be glad to discuss the subject more fully. As it is, we shall have to confine ourselves to a narrow phase of the same.

True, the railroads have failed to attract capital, but that is not due to the existence of non-taxable securities as it is to reduced savings caused by the over-regulation of the railroads at the hands of the government. Industrial enterprise usually commands more capital than it can absorb or upon which it can promise a reasonable and safe earning.

To hold that investment in municipal bonds as applied to the schools means to invest in non-productive projects is not entirely true. The construction of a schoolhouse involves the employment of labor just as does a factory plant or a railroad. The school system employs teachers and janitors and thus distributes a payroll just as railroads and factories employ labor and dispense payrolls. The schools perform an essential service and are therefore productive.

The United States government can gain but little by inflicting a tax upon its own bonds. The fact that they are tax exempt enables the government in normal times to issue them at a lower rate of interest, while upon taxable securities the government must pay a higher rate of interest. Money, or the use of money, is a matter of supply and demand. Any burden imposed upon credits is ultimately borne by the borrower, or the ultimate consumer.

To impose a government tax upon school bonds will mean that the bonds will command a lower premium rate, or must offer a higher rate of interest. The cost of education will be that much higher which the local taxpayer must pay. In brief, to subject schoolhouse bonds to a federal tax will constitute a tax upon popular education.

Under the present form of government, realizing that the schools are an essential to the nation's stability and perpetuity, such a procedure is illogical, untenable and unwise.

THE BUSINESS APPROACH TO EDUCATION.

There has been a tendency in recent years to infuse what is commonly known as sound business methods in the administration of the American schools. Not unlike commercial and industrial enterprises which resort to inventories, cost systems and profit sheets, the school systems have been subjected to surveys, mental and intelligence tests for the purpose of determining quantity and quality of education disseminated.

With the pressure placed upon the school budgets, adjusting expenditure with revenues, cutting corners and evolving economies, the strain has been in the direction of better production rather than lower costs.

"In business, for instance, a given investment in the form of expenditures of money requires that profits or dividends be received," said a prominent business man recently. "The investment in time and effort which

teachers and students make, if their work is to be effective, should also make dividends and profits. What we need in education, as I see it, is the building up of some sort of cost accounting methods by which we may to an increasing degree measure the results secured even though these results cannot be shown in dollars and cents."

There is no reason why the principle adhered to in business, namely, that the investment of capital and the application of labor shall achieve profitable results, cannot be translated into terms of educational investments and educational dividends.

The factors that determine the solvency and prosperity of a business undertaking are equally applicable to an educational enterprise. The latter may deal with a radically different commodity, whose quality is only ascertainable through the application of subtle methods, yet what is possible in the one is equally possible in the other. Investment and returns may be reduced to definite terms.

The boards of education, throughout the country, usually reflect the business sentiment of the community. In other words, every board has in its personnel some representative merchants or manufacturers who recognize the expediency of measuring results with costs, and who are striving to ascertain the factors that will enable the measurements.

The tendency to arrive at a better estimate of what the schoolroom produces in the light of the investment and maintenance will receive its further stimulus in the increasing burdens imposed upon a taxpaying constituency. If the school plant is to be conducted upon higher standards of efficiency they cannot be conducted upon a lower cost basis.

The search for new sources of revenue, the growing desire for an adjustment of the educational product to the economies as well as the social and civic needs of a modern day, will also prompt a greater scrutiny of school investment and school product. The taxpayer will desire a stricter accounting on the invested dollar in education.

BUSINESS MEN AND TEACHERS.

The comingling of the business public in a community with the professional workers in the schools now proposed in some sections of the country, has a two-fold significance. It tends on the one hand to instill on the part of the business man a higher appreciation for the mission of the schools, and on the other a better understanding on the part of the teacher of the school needs of the community.

In discussing the value which the teaching profession might gain through closer association with the business public we may go a little further. The classroom worker who deals daily with inferior minds, and whose social ties are confined to other professional workers and the family circle, is in need of the other viewpoint. As a producer he must know some things about the consumer.

That viewpoint is afforded by the man of affairs, who constitutes the constructor and builder of the community's economic and material progress. He may see the schoolhouse and its purpose from a distant point but he knows what its product ought to be.

There is another phase which may be mentioned here and which is evolved out of the social contact between man and man. The teacher who is somewhat isolated from the main stream of common thought and action, as applied to the commercial world, is apt to become a trifle narrow and one sided.

His sense of proportion may require adjustments which can best come to him through a frequent commingling with those in other

walks of life. He will secure a better angle upon himself and his mission.

In an Ohio town the Chamber of Commerce recently entertained a hundred teachers at dinner and indulged in a free exchange of views with highly gratifying results. President Lederer of the Detroit school board now advocates a closer contact of the teaching profession with the business world.

Let the thought grow in every community and result in a closer contact between the professional and business workers. Let the home merchant and banker demonstrate an appreciation of the schoolroom worker, and let, on the other hand, the teacher secure an appreciation of that toil and labor, zeal and energy manifested in the industrial and commercial world which make the modern school and its services a possibility.

THE SCHOOL BOARD AND THE PUBLIC.

The board of education of a mid-west city, conscious of the fact that the public was not sufficiently apprised of its school building needs, appointed a committee of fifteen prominent citizens to serve in an advisory capacity. It has asked the committee to make a study of the building needs and report a program covering a period of ten years.

This method of establishing a closer connection between the general public and the school administrative authorities has considerable merit. Whenever there has been a severe tax pressure and a lax public interest, the school boards have been placed in a state of uncertainty.

But, where growing school authorities have approached the subject of school housing with a view of anticipating future needs in a comprehensive program, they have felt the need of an affirmative public sentiment. In some cities publicity campaigns have been staged with a view of bringing an entire community into a more intimate touch with the school, its services, and its needs. To bring into counsel representative men of the community may prove to be a more direct and less cumbersome process of inspiring public confidence in the affairs of the school system. If the citizens are well chosen, complete their task with efficiency, and make their recommendations from the standpoint of community interest, the plan will, no doubt, work out well.

After all, the real purpose here is to serve the interests of the schools in a complete way and to secure public cooperation without which no school system can be successful. The school leaders must either go to the public and acquaint the same with the school needs, or address themselves to a representative body of citizens.

Public sentiment must favor adequate school accommodations if these are to be adequately provided.

TENDENCIES IN SCHOOL ADMINISTRATION.

During the past quarter of a century school administration has been characterized by many wholesome tendencies. Some of these have culminated into gratifying realities, others still remain to be realized.

The need for better definitions as to the scope of school boards and the function of superintendents, and the relations that must guide them, turned the attention of educators to the subject of school administration. The old time maxim "as is the teacher, so is the school" had lost nothing of its meaning, but it also became evident that an efficient teaching force could best be secured through a competent school board.

Thus, improvement in the character and efficiency of school boards was sought through

a reduction in their size, lengthening of their tenure of office, through representation at large, rather than through district representation, and by choosing them through the elective rather than the appointive system.

The reform achieved in this direction has not only led to a higher type of boards of education, but has also, through them, brought about a better division of school administrative duties and responsibilities.

Occasionally, however, it is found where some city is still clinging to old-time school administrative methods and experiencing all the evils that attend them.

At Wheeling, W. Va., where the United States Bureau of Education completed a survey, it is found that the school board still assumes the duties which properly go to the superintendent. The board is cumbersome and operates largely through committees. The report says: "Four of these committees are each as large as the entire school board of New York City, and the smaller committees are each the size of the entire school board of Albany or Troy."

The report continues: "To summarize the situation, perhaps rather bluntly, the fundamental weakness in the public school system in Wheeling has been executive management by laymen. There are many analogies between the management of a school system by a board of education and the management of a business or a factory by a board of directors; but the fundamental principles of organization and management generally accepted in business and industry, and in progressive school systems, have not been operative in the Wheeling schools."

"The board of directors of a business or manufacturing corporation does not mix in the details of the work. It employs a chief executive, outlines its policies to him, makes clear to him the results to be secured, gives him control over the means to be employed, and then demands that he get results. They then employ various methods of accounting, auditing, and otherwise checking up the results."

"Let the business man on the board imagine what would happen to his bank, or store or factory, if it were managed by a committee of outsiders who dipped into the business, for, say, two hours each week. The conduct of a big school system is a more complex, difficult, and technical job than merchandising or banking."

"What is needed is the adoption of a plan by which the board will get things done in responsible ways, and enforce responsibility, without doing the things themselves."

While it may seem indeed odd to many school administrators of the present day to find school systems clinging to old-time conceptions and standards it nevertheless remains that twenty-five years ago these conceptions and standards were the rule, and not the exception.

The experts who made the survey above mentioned, wisely assert that "the school board's task is not to do the work, but to get it done: first, by directing, and second, by inspecting so as to be sure the work is efficiently and economically done."

CHATS DURING RECESS.

"Our present educational system was largely designed by a group of blind pedagogs who met in a cellar on a dark night and then foisted the result of their efforts upon a defenseless world," says Dr. Charles Zueblin, the lecturer. And the dear public continues to pay an admission price for twaddle of this character.

An affirmative resolution by a good man is more attractive than "swearing off." Will C. Wood of California says: "I made a new year's resolution to seek reelection as state superintendent of schools."

Salaries of Superintendents in Cities from 50,000 to 100,000 in Population

Superintendent O. C. Pratt, Spokane, Wash.

A salary questionnaire was recently sent to the superintendent of the 74 cities having a population between 50,000 and 100,000. Replies were received from 64 superintendents. These replies show both the trend and the present status of the salaries of superintendents in cities of the size indicated.

The questions were as follows:

1. What salary did the superintendency in your city pay in 1916-1917?
2. What is your salary for the current school year?
3. Are you furnished with an automobile in addition to the salary just mentioned?
4. If not, does your board make an allowance toward the upkeep of your automobile?
5. If you receive such allowance, what is the amount annually?
6. In addition to your regular salary, are your expenses paid to educational meetings?
7. If so, to what ones?
8. What was the amount of expense thus paid last year?

Perhaps the most striking feature about the salaries of superintendents in these cities is that there is no discernible correlation between the size of the city and the size of the salary. Five years ago the larger cities on the whole paid larger salaries. Now the median salary is \$6,000 both for the cities between 50,000 and 60,000 in population and for those between 90,000 and 100,000. The median salary for all cities was \$3,700 in 1916-17 and is \$6,000 now. The median salary increase during the five-year interval was 43.7 per cent.

Automobiles are furnished for the use of superintendents in 23 of the 64 cities, or slightly more than one-third of them. We find here a decided correlation between the size of the city and the furnishing of an automobile. In the 32 smaller cities an automobile is furnished in 25 per cent of them only, while in the 32 larger cities an automobile is furnished in 46.9 per cent.

The expenses of superintendents to educational meetings are paid partially or wholly in all but five of the 64 cities.

SEEKING FINANCIAL INDEPENDENCE.

The New York legislature will be the scene where the contest for the financial independence of the New York City board of education is to be waged. The budgets of that body are now, and have been for many years, subject to the approval of the board of estimates, a department of the municipal government.

This arrangement, it is held, brings the school interests under the domination of the political factors of the local government. Needed school structures are unnecessarily delayed, it is claimed, and the school executives are hampered in carrying out policies designed to preserve the standards of the teaching forces.

It is now proposed to secure an absolute divorce of the board of education and the city government. The board, under legal limitations, is to fix its own budgets in accordance with the needs of the school system, and to be freed from interference by any other department of government.

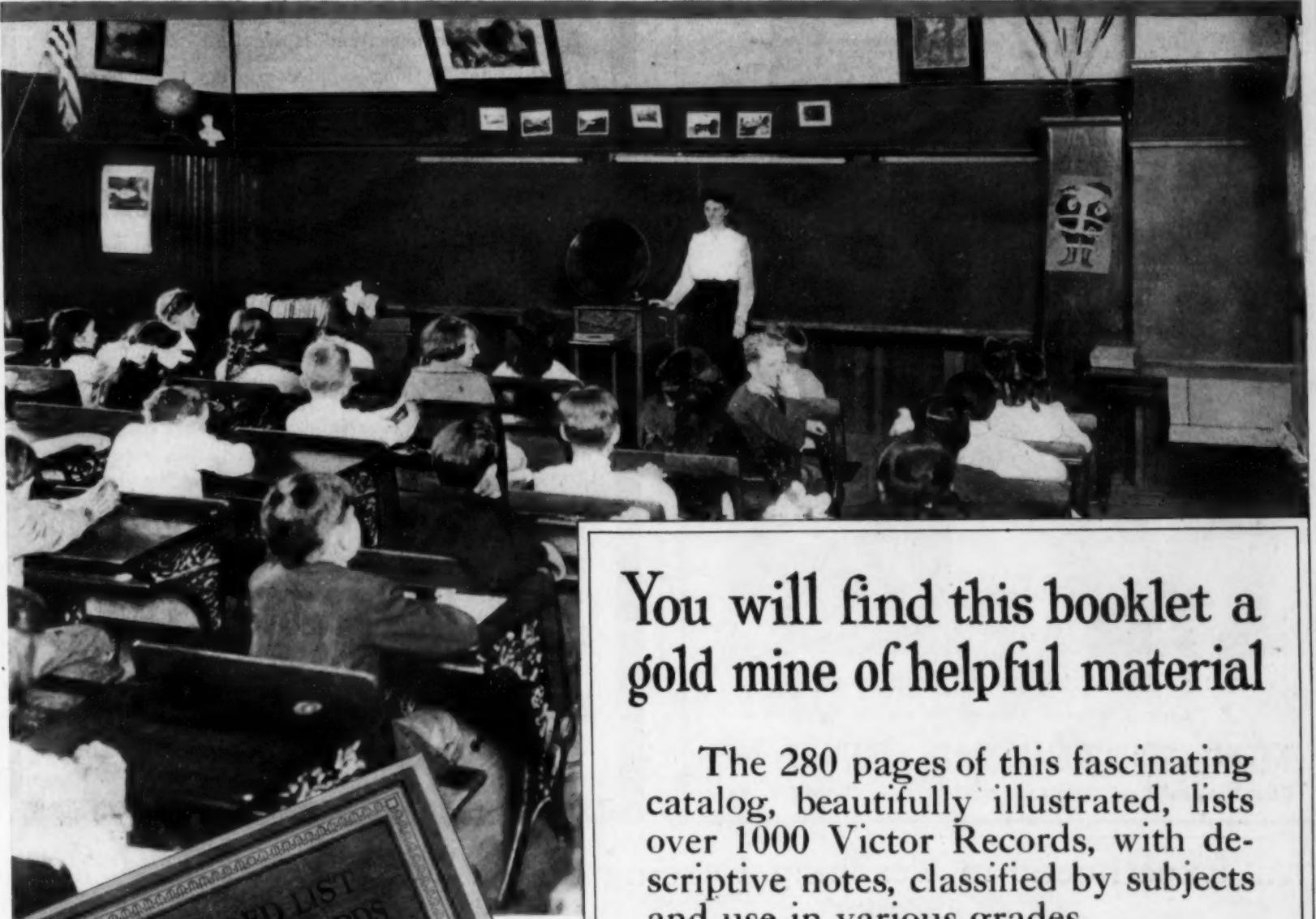
Oddly enough the members of the board of education, who are appointed by the administration,

(Concluded on Page 98)

No.	CITY	POPULATION	SALARY		Per Cent of Increase	QUESTIONS							
			1916-17	1921-22		3	4	5	6	7	8		
1.	Topeka, Kansas	50,022	\$4,800	\$5,100	6.2	No	No		Yes	1,2	\$250.00		
2.	Huntington, W. Va.	50,177	3,600	6,000	66.7	No	No		Yes	2,5	175.00		
3.	Bethlehem, Pennsylvania	50,358		6,000		No	Yes	Tires and Tubes	Yes	2,3			
4.	Atlantic City, New Jersey	50,707	4,250	7,000	64.7	Yes			Yes	9	600.00		
5.	East Orange, New Jersey	50,710	4,750	7,200	50.1	No	Yes	\$3.00	Yes	3,4	500.00		
6.	Niagara Falls, New York	50,760	3,100	6,000	93.5	Yes			Yes	9	300.00		
7.	Roanoke, Virginia	50,842	3,475	4,500	29.5	No	No		Yes	2	75.00		
8.	Augusta, Georgia	52,548	4,000	6,000	50.0	Yes			Yes		100.00		
9.	Lancaster, Pennsylvania	53,150	3,500	4,000	14.3	No	No		Yes	2	35.00		
10.	Haverhill, Massachusetts	53,884	3,500	6,000	71.4	No	Yes	\$4.00	Yes	9	150.00		
11.	Portsmouth, Virginia	54,387	3,300	6,000	36.4	No	No		Yes	2,3	175.00		
12.	Lincoln, Nebraska	54,948	4,000	6,000	50.0	No	No		Yes	1,2,5	125.00		
13.	Gary, Indiana	55,378	6,000	10,000	66.7	No	Yes	\$3.00	No				
14.	Long Beach, California	55,593	4,500	6,000	33.3	No	No		Yes	6	38.51		
15.	Berkeley, California	56,036	3,600	6,000	66.7	No	Yes	\$6.00	Yes	1,6	475.06		
16.	Wheeling, West Virginia	56,208	3,000	5,000	66.7	No	No		Yes	1,6	100.00		
17.	Covington, Kentucky	57,121		3,450		No	No		Yes	2,7,5	150.00		
18.	Lansing, Michigan	57,327	2,400	6,000	150.0	No	No		Yes	8	128.91		
19.	Chattanooga, Tennessee	57,895	2,500	4,000	60.0	No	Yes	Repairs and gas	No				
20.	Chester, Pennsylvania	58,030	3,500	5,000	42.8	No	No		Yes	2,7	150.00		
21.	Racine, Wisconsin	58,593	3,000	6,000	100.0	No	No		Yes	9	250.00		
22.	Springfield, Illinois	59,183	5,000	6,000	20.0	No	No		Yes	4,10	180.00		
23.	New Britain, Connecticut	59,316	6,000	6,000	0.0	No	Yes	\$2.50	Yes	9	150.00		
MEDIAN			3,500	6,000	50.1								
24.	Holyoke, Massachusetts	60,203	3,375	4,400	30.4	Yes			Yes	3,4,11	600.00		
25.	Altoona, Pennsylvania	60,331	3,400	5,000	47.0	No	No		Yes	1,2,10	200.00		
26.	Mobile, Alabama	60,777	3,800	4,500	18.4	Yes			Yes	2	200.00		
27.	Springfield, Ohio	60,840	3,000	6,500	116.7	Yes			No				
28.	Saginaw, Michigan	61,903	3,000	6,000	100.0	No	Yes	\$3.50	Yes	2	200.00		
29.	Passaic, New Jersey	63,841	3,600	6,000	66.7	No	No		Yes	2	30.00		
30.	Pawtucket, Rhode Island	64,248	3,114	4,500	44.5	Yes			Yes	12	0.00		
31.	Little Rock, Arkansas	65,142	3,300	4,000	21.2	Yes			Yes				
32.	Rockford, Illinois	65,651	4,500	7,000	55.5	No	No		Yes	2,3	256.99		
33.	Sacramento, California	65,908	3,600	6,000	66.7	No	No		Yes	2,3	450.00		
34.	Terre Haute, Indiana	66,083	3,600	5,000	38.9	No	No		Yes	2,12	90.00		
35.	Binghamton, New York	66,800	7,000	7,000	0.0	Yes			Yes	9	600.00		
36.	Charleston, South Carolina	67,957	3,400	5,400	58.8	No	No		Yes	2	111.84		
37.	Portland, Maine	69,272	3,050	6,000	96.7	No	No		Yes	9	337.17		
MEDIAN			3,400	5,700	51.2								
38.	South Bend, Indiana	70,983	3,800	5,400	42.1	Yes			Yes	9	224.63		
39.	Tulsa, Oklahoma	72,075	5,000	9,500	90.0	No	Yes	\$3.60	Yes	2,7	300.00		
40.	Wichita, Kansas	72,217	3,800	6,300	65.8	No	No		Yes	3,4	150.00		
41.	Allentown, Pennsylvania	73,502	3,500	5,000	42.8	No	No		Yes	9	25.00		
42.	Wilkes-Barre, Pennsylvania	73,833	4,500	5,500	22.2	No	No		Yes	9	228.80		
43.	San Diego, California	74,683	4,400	6,000	36.4	No	Yes	\$6.00	Yes	2	400.00		
44.	Harrisburg, Pennsylvania	75,917	4,000	5,000	25.0	No	No		Yes	9	200.00		
45.	Bayonne, New Jersey	76,754	6,000	8,500	41.7	Yes			Yes	2,5			
46.	El Paso, Texas	77,560	4,200	5,600	33.3	Yes			Yes		125.00		
47.	Knoxville, Tennessee	77,818	4,000	4,500	12.5	No	Yes	\$2.50	No				
48.	St. Joseph, Missouri	77,939	3,000	6,000	100.0	Yes			Yes	1,2	450.00		
49.	Manchester, New Hampshire	78,384	4,000	4,500	12.5	Yes			Yes	1	130.00		
MEDIAN			4,000	5,550	39.0								
50.	Evansville, Indiana	85,264	4,200	7,500	78.6	No	No		Yes	1	80.00		
51.	Fort Wayne, Indiana	86,549	4,200	6,000	42.9	Yes			Yes	1,2	250.00		
52.	Canton, Ohio	87,091	3,800	6,000	58.0	No	No		No				
53.	Schenectady, New York	88,723	3,500	4,500	28.6	No	No		Yes		200.00		
MEDIAN			4,000	6,000	50.4								
54.	Oklahoma City, Oklahoma	91,295	3,600	6,000	66.7	Yes			Yes	2	300.00		
55.	Jacksonville, Florida	91,558	5,000	6,500	30.0	Yes			Yes	9			
56.	Flint, Michigan	91,599	3,600	6,500	80.6	Yes			Yes	3,4	110.00		
57.	Waterbury, Connecticut	91,715	4,200	6,300	50.0	No	No		Yes	2			
58.	Somerville, Massachusetts	93,091	3,500	5,000	42.8	No	Yes	\$4.00	Yes	2,5	100.00		
59.	Utica, New York	94,156	4,000	5,500	37.5	Yes			Yes	9	1200.00		
60.	Lawrence, Massachusetts	94,270	4,000	4,900	22.5	Yes			Yes	9	100.00		
61.	Elizabeth, New Jersey	95,783	4,000	5,500	37.5	Yes			Yes	9	250.00		
62.	Tacoma, Washington	96,965	5,000	6,120	22.4	Yes			Yes	1,2,11	46.69		
63.	Duluth, Minnesota	98,917	3,500	7,500	114.3	Yes			Yes	3,4,5	604.48		
64.	Lynn, Massachusetts	99,148	3,500	3,900	11.4	No	Yes	Gas and oil	Yes	1	300.00		
MEDIAN			4,000	6,000	37.5								
MEDIAN FOR ALL			3,700	6,000	43.7								

NOTE:—The figures in the column under question 7 are to be interpreted as follows: 1, N. E. A.; 2, Department of Superintendence; 3, State Meetings; 4, National Meetings; 5, Other Meetings; 6, State Superintendents; 7, State Association; 8, Some Meetings; 9, All Meetings Attended; 10, State School Board; 11, Sectional Meeting; 12, Expenses Paid if asked.

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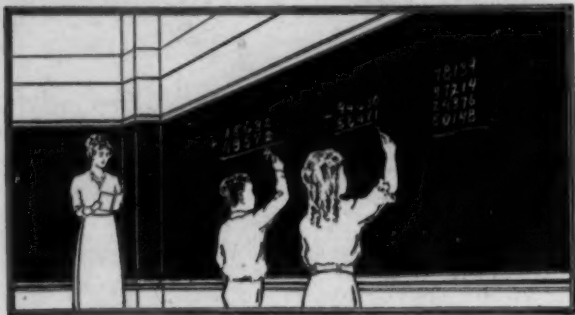


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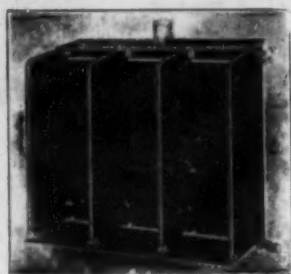
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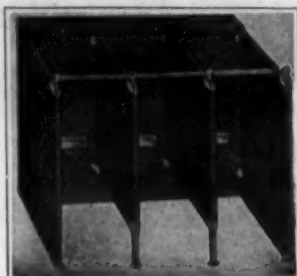
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An Experiment in Teaching Reading in the Grades

In accordance with the expressed desire of Supt. G. N. Child of Salt Lake, Utah, special attention was given recently by Assistant Supt. J. T. Worlton to certain fundamental subjects of study, i. e., reading, arithmetic, geography and spelling. Special studies and experiments were made during the year in these subjects for the purpose of (1) Improving course of study, (2) Discovering better pedagogical methods of teaching, and (3) Measuring classroom results with a view of providing remedies for weaknesses discovered.

The material here presented represents an extract from the annual report of Mr. Worlton on the special work in silent reading. The investigation took the form of an experiment in methods of teaching children how to interpret rapidly and accurately the printed page, and is in effect an answer to the problem of how to teach "thought-getting" in reading.

The Basis of the Experiment.

The principal objective was to increase the speed in silent reading, without decreasing the comprehension. Stated in the form of specific questions, the purpose was to secure, if possible, at least tentative answers to the following questions:

1. How can speed in silent reading be increased without decreasing the comprehension?
2. Can successful methods for improving the rate in silent reading be adapted to the ordinary classroom with the reading material at present available?
3. Is comprehension increased, decreased, or affected by an increase in the rate?
4. What grades show the greatest susceptibility to an increase in the rate?
5. What are consistent standards for rate in silent reading?

Factors Affecting Speed and Comprehension in Silent Reading.

The experiment was conducted under the assumption that the following factors affect the speed and comprehension as indicated. These statements of principles are supported by Gray,

Oberholtzer, Huey, Dodge, Dearborn, and others as a result of extensive investigations carried on during recent years.

1. Practice in rapid silent reading has a favorable effect in increasing the rate of reading.
2. "Lip reading" has a detrimental effect on the rate of reading.
3. Training in perception by the use of short exposure exercises combined with practice in rapid silent reading is an effective method of increasing the rate.
4. Familiarity with the subject matter has a favorable influence upon the rate.
5. The attitude of the pupil towards the material to be read and his purpose in reading affect the rate of reading.
6. Rapid silent reading is characterized by an absence of "day-dreaming" and dawdling.
7. Recognition of the value of the habit of rapid silent reading combined with a determination to acquire the habit is of fundamental importance in an attempt to increase the rate.
8. The awareness of a watch accurately measuring the rate induces an "atmosphere" favorable to rapid reading.
9. The graphical representation of a pupil's individual performance, enabling him to compare at a glance his rate with that of yesterday is an important factor in arousing in the pupil a determination to improve. A similar representation of the class median is helpful in creating a desire on the part of the class in improving its past record.

Classroom Methods and Procedure.

The classroom procedure and methods used in teaching the experimental pupils are indicated in the following extract taken from directions given to teachers at the beginning of the experiment.

"In determining the procedure in the classroom the factors affecting the rate and comprehension should be given careful consideration. While the methods and devices to be employed in this experiment may vary as the experiment progresses the objective remains the same and

must never be lost sight of. The following suggestions, it is hoped, will furnish valuable helps to teachers in determining classroom procedure.

"1. Divide your class into pairs of pupils of approximately equal speed in reading as determined by the Monroe Standardized Silent Reading Test. Place one member of each pair in the experimental group and the other in the control group. The aggregate scores in rate of these two groups should be approximately equal.

"2. Re-seat your pupils in accordance with the group to which they belong and take up the work in reading at a different time for the separate groups. If conditions will permit, separate the groups into different rooms during the reading lesson. The same amount of time—25 or 30 minutes per day—is to be given to reading by each group. The purpose of these precautions is to guarantee a strict separation of the groups and equal time for reading during the experimental work. The control group will be given work in reading as at present planned, the emphasis falling upon oral reading; the experimental group will be given training designed especially to improve the pupil's rate of comprehension in silent reading. About one-third of the time given to reading by the experimental group will be devoted to oral reading.

The Experimental Group.

"The first concern of the teacher is to develop in pupils an appreciation of the value of the habit of rapid silent reading and a determination to acquire the habit. This is a very important factor in securing satisfactory results.

"The method of training consists essentially of alternate reading (silent) and reproduction. It is suggested that the reading period be broken into stretches of three, four, or five minutes each and that during this period pupils be encouraged to read as rapidly as possible, consistent, of course, with a proper interpretation of the thought. These short periods safeguard against fatigue and also against a relapse into the customary leisurely rate, the purpose being to secure the greatest possible speed by an intensity of effort which could not be maintained over a long period, and thereby break up the old order of eye-movements and establish new ones of a more advantageous type.

(Continued on Page 68)



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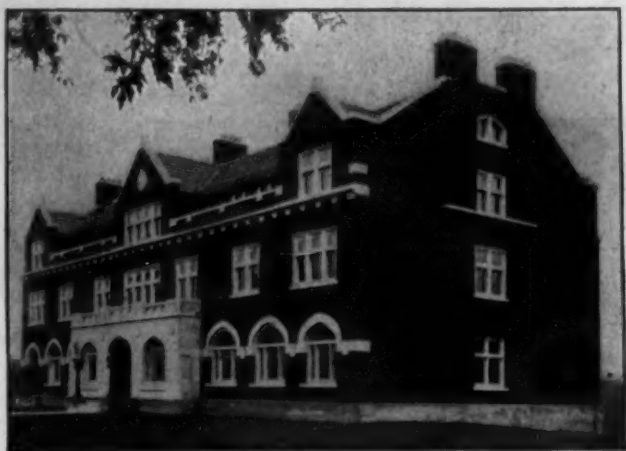
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(Continued from Page 66)

"Teachers should make a conscious effort from the beginning to discover the 'lip readers', and train these pupils in correct habits of silent reading.

"At the close of the reading the pupils should be called upon to reproduce what they have read. This may be done by free paraphrase, oral or written, or by answering specific questions. The reproduction should be brief, its purpose being to determine whether the pupil has grasped the essential thoughts. The practice material should be relatively easy for the grade. Near the end of each lesson the teachers should make the official test for the day in speed and comprehension.

"It is suggested that material for this work be taken from any convenient source. Regular and supplementary textbooks in reading, language, geography, and history are well adapted for the work. The lesson should be carefully planned and the questions to be used in determining the comprehension score should be written out before the class begins. It is usually better to ask questions that can be answered by definite words from the selection."

To test the efficacy of the two types of training they were tried in 44 B classes representing 24 schools, 10 4B classes, 15 5B classes, 14 6B classes, 2 7B classes, and 2 8B classes. In these classes there was a total of approximately 1,400 pupils.

The length of the reading period in all the grades was 25 minutes. Each class was divided into two groups whose aggregate scores in rate as determined by the Monroe Standardized Silent Reading Test Form I were approximately equal. One group, called the experimental or A group, received the special training; the other group, called the control or B group, continued the conventional work in reading, the emphasis falling on oral reading.

The training continued from April 14th, 1921, to June 2nd, 1921, a period of 37 school days. At the beginning and at the end of this training period the Monroe Standardized Silent Reading Test, Forms 1 and 2, respectively were submitted to both experimental and control groups in all the classes in order to determine the improvement in speed and comprehension as a re-

sult of the training.

As an additional check on speed and comprehension a Special Test was given June 2nd, following immediately the second Monroe Test. The purpose of this test was to determine whether any differences in the ability of the two groups as indicated by the Monroe Test would be observable when the children were reading usual reading matter within their comprehension. An additional object in giving the Special Test was to determine how any superiority in speed which the experimental pupils might show over the control pupils would affect their comprehension ability in comparison with that of the control pupils when the slower group was given all the time necessary to finish the exercise.

How the Town Was Saved by a Clock.

The test exercise taken from "The Silent Readers" (Book V), was used for the Special Test in 4B, 5B, and 6B classes.

In the seventh and eighth grades a lesson from "The Silent Readers" (Book VII)—How We Get the Time—was the material used for the Special Test. The numbers at the ends of the lines were printed as a convenience for teachers in securing the rate of reading.

In order to secure uniformity in the administration of the test and the scoring of the papers, the following directions which accompanied the Special Test were followed in all classes:

Silent Reading.

The tests "How the Town Was Saved by a Clock" to be used in 4B, 5B, and 6B classes and "How We Get the Time", to be used in 7B and 8B classes, are designated to test both speed and comprehension. The significant feature of these tests is the plan which gives the slow pupil all the time he needs to finish the exercise before the class is required to answer the questions.

The following directions for giving the test should be carefully observed:

1. Distribute the papers "face down" and instruct the pupils to leave them in that position until the signal is given to begin.
2. Allow exactly one minute for the speed test.
3. Pupils will indicate by a cross the point reached in the reading when the signal is given at the end of the minute, and will then continue

the reading until the exercise is finished. When the last child finishes collect the reading exercises and test the pupils for comprehension. The questions are to be written on the board. Pupils will use the regular newsprint paper for the comprehension test.

The pupil's rate score will be the number of words read during the first minute of the test and will be seen at a glance with the aid of the numbers printed at the end of the lines. The comprehension score will indicate in terms of per cent the number of questions correctly answered. Allow twenty per cent for each correct answer and count each as wholly right or wholly wrong.

Report as the class scores the average of the individual scores. Use examination paper for the class report and list the pupils by number in the order of speed and indicate the speed and comprehension score of each pupil. A separate report will be made for the experimental and control groups.

Reports should be filed in the Superintendent's office together with the examination papers.

How the Town Was Saved by a Clock.

Examination.

1. What surrounded the ancient town of Basel as a protection against its enemies?

Ans. A high wall.

2. Where did the old man live who kept the gate?

Ans. At the foot of the tower.

3. Where did the traitors live who planned to turn the town over to its enemies?

Ans. In the town.

4. What time was it when the old guardian discovered the traitors near the tower?

Ans. Nearly midnight.

5. What did the old man do to protect the town from its enemies?

Ans. Turned the clock one hour ahead.

How We Get the Time.

Examination.

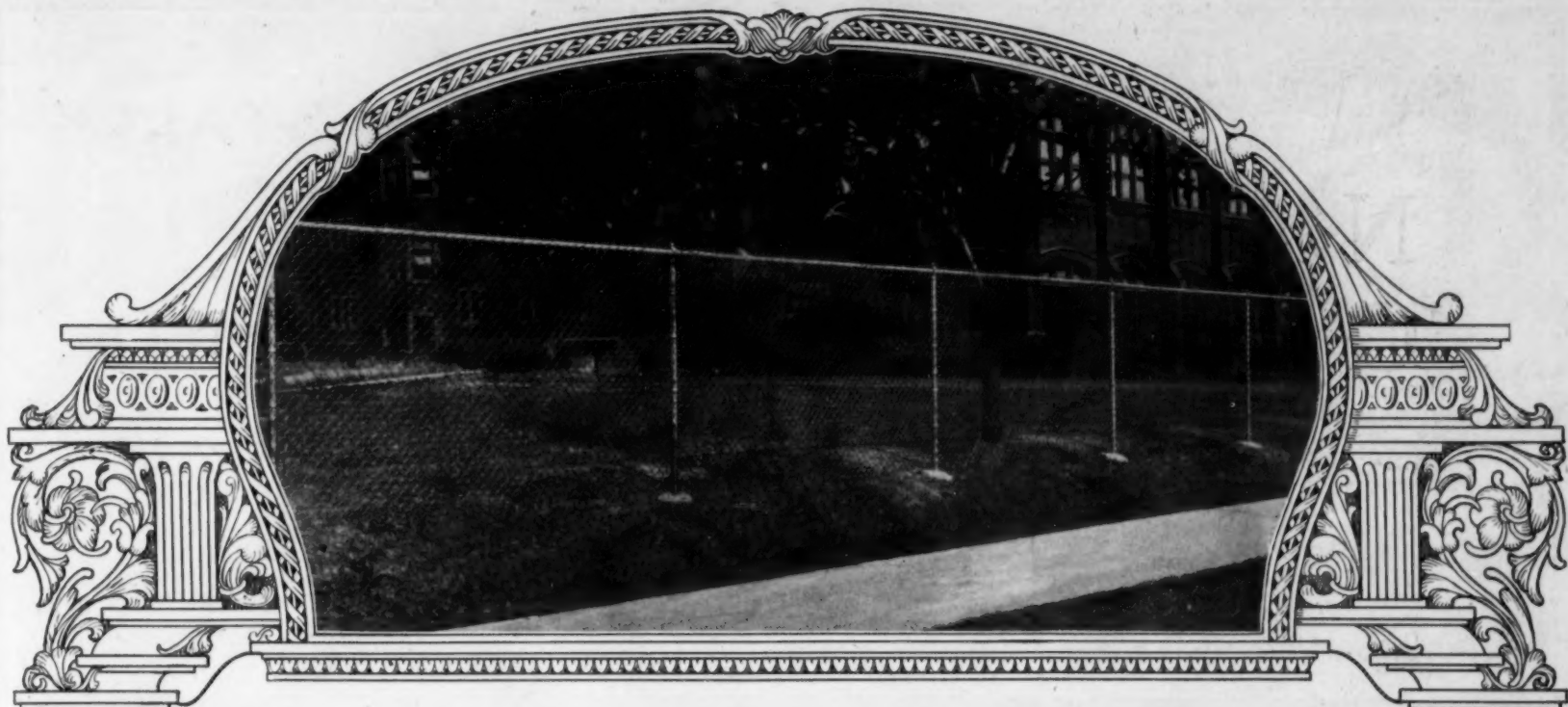
1. Where is the observatory located?

Ans. Near Washington or in Washington.

2. Why is the standard clock kept in a vault underground?

Ans. To get a uniform temperature.

(Continued on Page 71)



Avoid Wrangles *with* Residents in School Neighborhoods

Children, in their play, thoughtlessly run beyond the borders of unfenced schoolgrounds on to nearby property. Lawns, shrubbery, gardens and flower-beds suffer mutilation or destruction; drying clothes are soiled and torn; neighboring residents are constantly annoyed.

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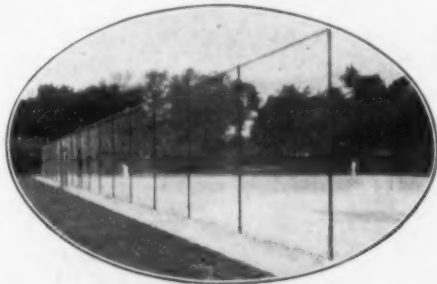
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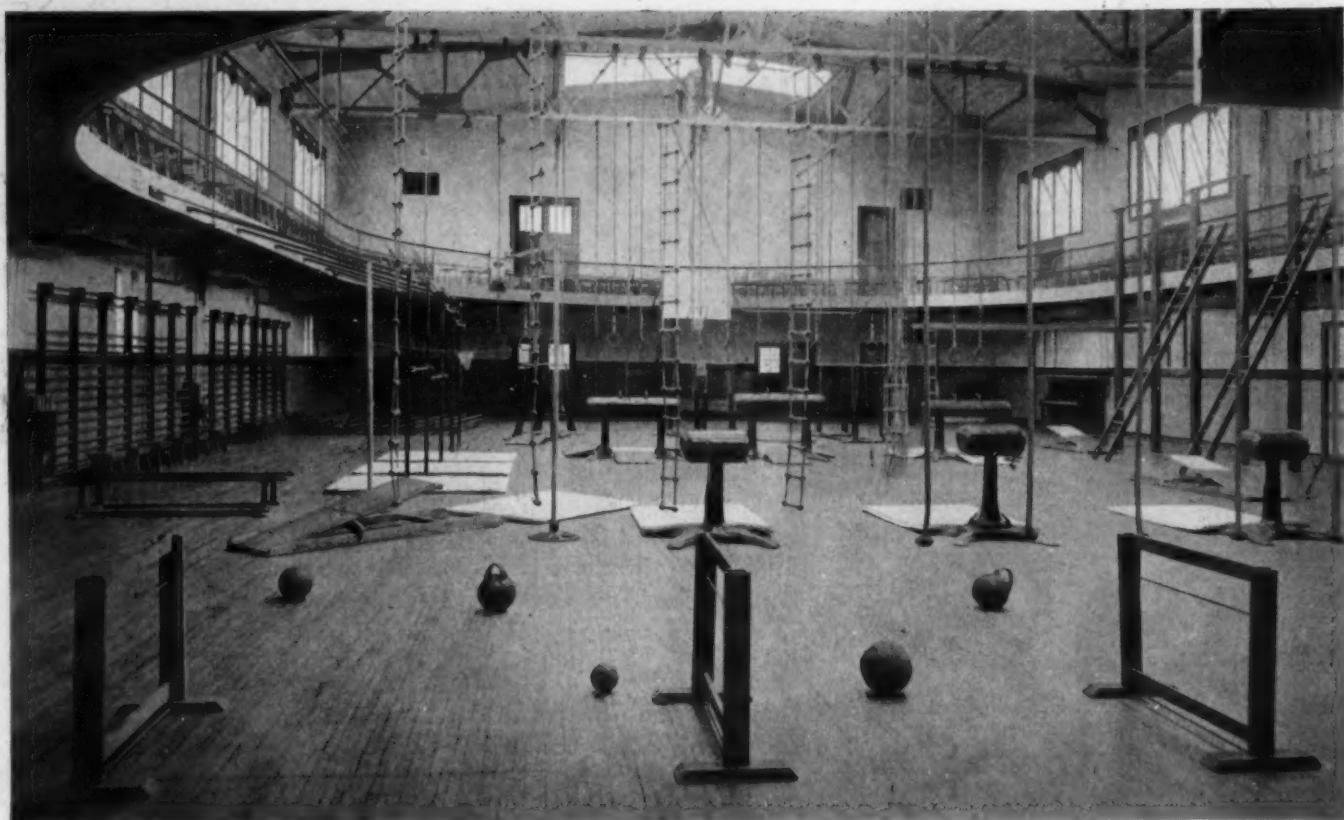


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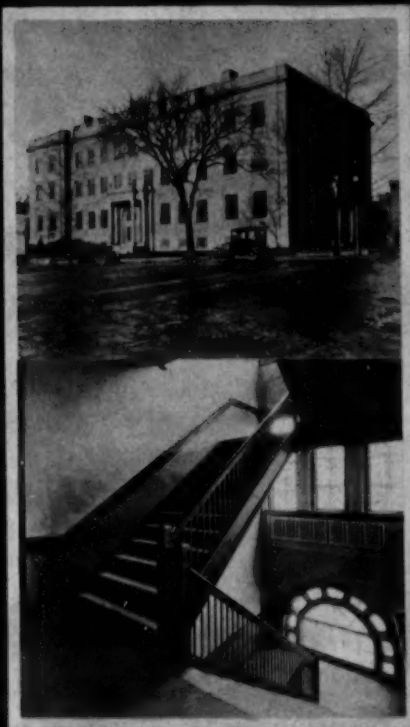
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(Continued from Page 68)

3. How frequently is the standard clock wound?

Ans. Twice each minute or once each half-minute.

4. What is the only thing that keeps perfect time?

Ans. The earth in its rotation.

5. At what time of day is "correct time" sent out from the observatory?

Ans. Noon.

The improvement in speed made by the experimental groups in comparison with the control groups as indicated by the Monroe Test is shown in Table I.

Table I. Average Rate of Reading for Experimental (a) and Control (B) Groups at Beginning and End of Training Period as Determined by the Monroe Standardized Silent Reading Test.

Grade	No. of Pupils	Test I		Test II		Gain (Words)		Gain Per Cent	
		A	B	A	B	A	B	A	B
IV B.....	328	71.0	69.9	83.7	72.7	12.7	2.8	17.9	4.0
V B.....	534	96.7	96.1						
VI B.....	441	93.4	92.3	117.3	106.3	23.9	14.0	25.6	15.2
VII B.....	58	108	100.5						
VIII B.....	40	120.5	108						
Average of 4B and 6B Classes..		82.2	81.1	100.5	89.5	18.3	8.4	21.8	9.6

Average gain of A for 4B and 6B classes=21.8%; of B=9.6%. A's superiority over B=12.2%.

Table I is to be read as follows: In the 4B classes, 328 pupils were enrolled. The average reading rate of A groups was 71.0 words per minute, of B groups 69.9 words per minute. In the second test the A groups averaged 83.7 words per minute and the B groups 72.7. The average gain in words of A groups was 12.7, of B groups 2.8. The A groups gained 17.9% in speed, the B groups 4.0%.

It will be observed that no results are given for 5B, 7B, and 8B classes in the second test. This situation is the result of an entirely unexpected development from the experiment. The experimental pupils made such substantial gains in speed that the median pupil in ten out of seventeen 5B classes finished before the time was up. It is interesting to note that three of the control groups scored similar results. For the same reason Test 2 which was given in the

6B, 7B and 8B classes was no measure of speed in 7B and 8B classes.

The effect of the Training in speed upon comprehension, as indicated by the Monroe Tests is presented in Table II; as indicated by the Special Test, the effect upon comprehension is shown in Table IV.

Table II is to be read in the same manner as Table I.

It will be noted that while the aim of the experiment was principally improvement in the rate of reading without detriment to the comprehension ability, the results show an improvement even larger in comprehension than in rate. The average gain in rate of experimental pupils

Table II. Average Comprehension in Reading for Experimental (A) Control (B) Groups at Beginning and End of Training Period as Determined by the Monroe Standardized Silent Reading Test.

Grade	No. of Pupils	Test I		Test II		Gain (Points)		Gain Per Cent	
		A	B	A	B	A	B	A	B
IV B.....	328	12.1	11.5	18.1	12.8	6.0	1.3	51.0	11.3
V B.....	534	18.6	18.8						
VI B.....	441	22.2	20.6	28.1	24.7	5.9	4.1	26.5	19.9
VII B.....	58	21.0	23.8						
VIII B.....	40	28.5	25.5						
Average of Classes 4B and 6B..		17.7	16.1	23.1	18.8	6.0	2.7	38.8	15.6

was 21.8%, in comprehension the classes gained 38.8%.

Average gain of A for 4B and 6B classes=38.8%; of B=15.6%. A's superiority over B=23.2%.

The improvement in speed made by the experimental pupils in comparison with the control pupils, as determined by their ability to read rapidly and understandingly the reading matter in the regular textbook is shown in Table III.

Table III. Average Rate of Reading for Experimental (A) and Control (B) Groups at End of Training Period as Determined by Special Test.

Grade	Pupils	Test June 2nd		A's Superiority	
		A	B	Words	Per cent
IV B	328	213.6	199.9	13.7	6.9
V B	534	237.2	220.4	16.8	7.6
VI B	441	261.4	234.7	26.7	11.4
VII B	58	247.7	226.8	20.9	9.2
VIII B	40	273.5	223.5	50.0	22.4
Average.....		246.7	221.1	25.6	11.5

Note—Table III is to be read as follows: In the 4B classes 328 pupils were enrolled. In the Special Test submitted June 2nd, the experimental or A pupils averaged 213.6 words per minute, the control or B pupils 199.9 words per minute. The experimental pupils read 13.7 more words per minute than the control pupils or 6.9%.

Table IV shows the results of the training in speed upon comprehension as indicated by the special test. In this test the slow readers were allowed all the time necessary to finish reading the exercise before the test for comprehension was taken.

Table IV. Average Compensation in Reading for Experimental (A) and Control (B) Groups at End of Training Period

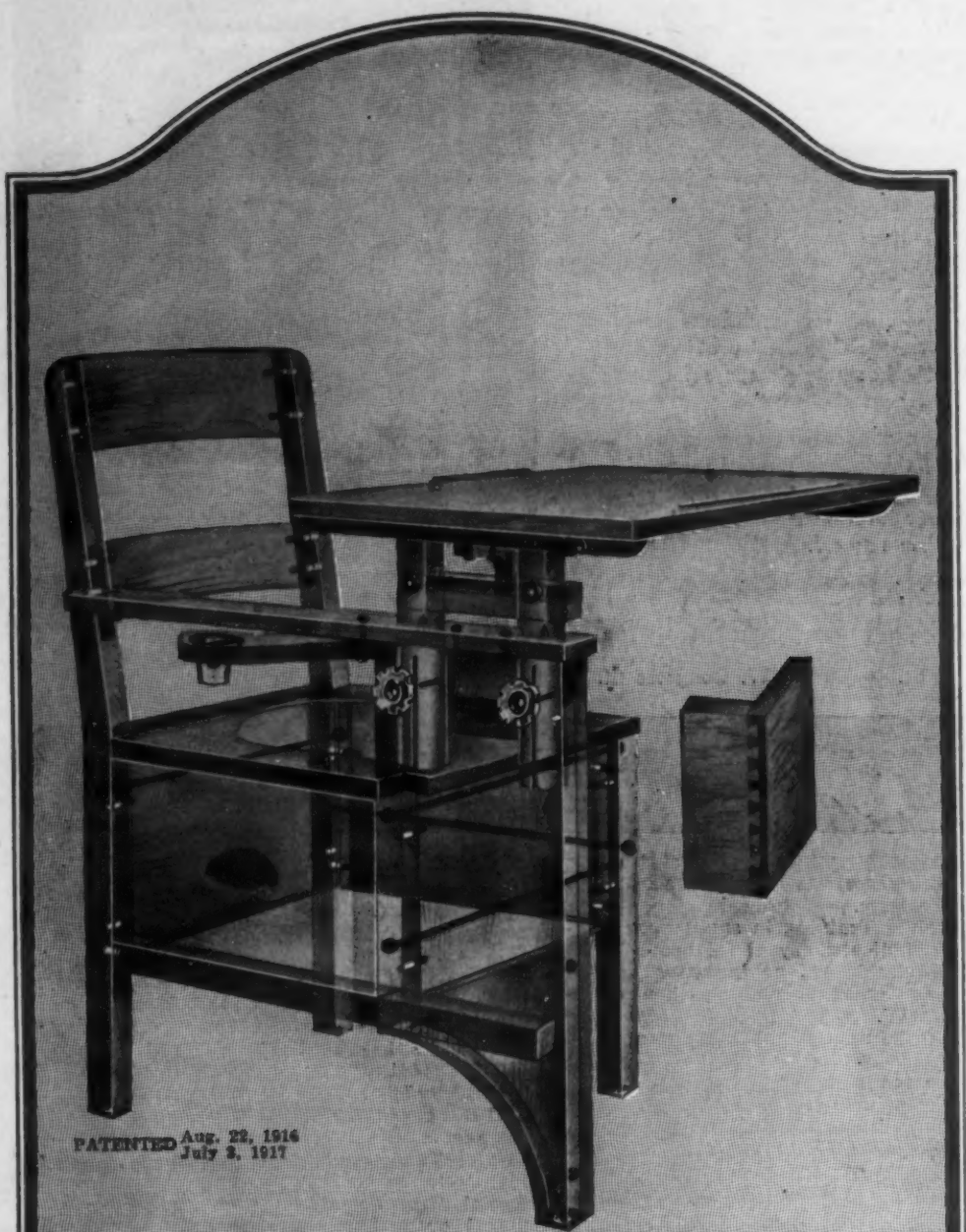
Grade	No. of Pupils	Test June 2nd (%)		A's Superiority	
		A	B	Per Cent	
IV B	328	72.9	65.3	7.6	
V B	534	77.5	67.5	10.0	
VI B	441	83.4	73.9	9.5	
VII B	58	66.5	61.9	4.6	
VIII B	40	78.2	70.0	8.2	
Average		75.7	67.7	8.0	

(Concluded on Page 75)

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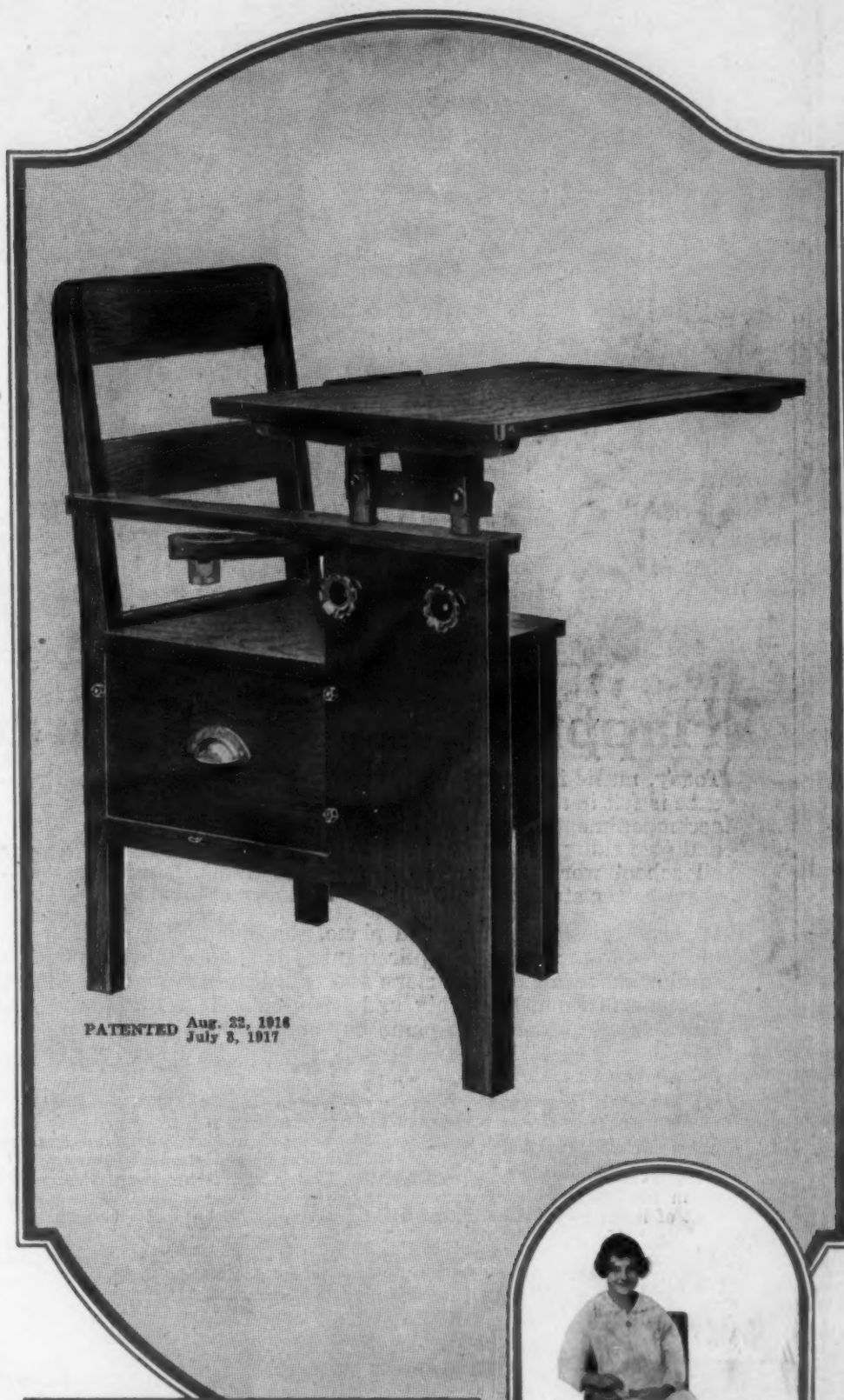
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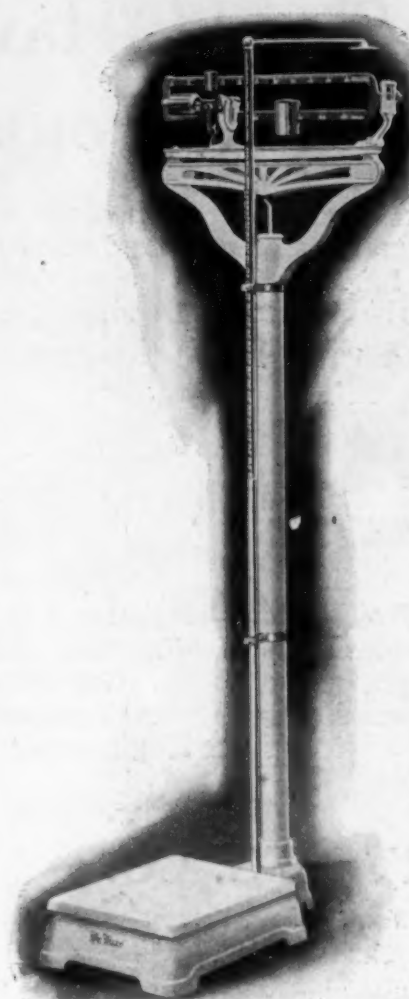
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(Concluded from Page 71)

Table IV is to be read in the same manner as Table III.

The superiority of the experimental pupils over the control pupils in the interpretation of the printed page, even when the control pupils are given the additional time necessary to finish the exercise, is clearly shown in Table IV. It is probable that if the conditions had permitted the two groups to be entirely separated during the reading period as they were in a few schools, the results would have shown even more conspicuous differences in ability between the two groups as the control pupils were not entirely unaffected by the experimental training.

Conclusion.

From a study of the results of the experiment the following conclusions seem to be justified:

1. The present rate in silent reading in grades 4B to 8B, inclusive is not as rapid as it should be.
2. The rates can be materially increased by systematic training under conditions obtaining in the average classroom and with the reading material at present available. It is evident however, that reading material better suited to training in silent reading should be provided.
3. Marked improvement in comprehension as determined by the number of questions answered correctly (Monroe Test) and also as determined by the accuracy of comprehension where the slow group had an equal opportunity to answer all the questions (Special Test) resulted from training in rapid silent reading.
4. When training in rapid silent reading is given to pupils who have not had such training before the increase in rate tends to advance generally with the advance in the grade; the higher the grade the greater the advance.
5. In the light of the increases in rate and comprehension easily obtainable in the upper grades by systematic training in rapid silent reading our immediate problem in reading is clearly defined. Systematic methods in teaching silent reading, as well as oral reading, should become an important part of the teaching process.

School Administration Notes

INTELLIGENCE TESTS AS A BASIS FOR HOMOGENEOUS GROUPING AT XENIA, O.

It is generally conceded that the chief service of the group intelligence test is to diagnose groups and by this means to help find the children of marked ability, those of mediocre talent, and those of lowest mental rating.

In determining ability groups by group tests, there is likely to be some variation between the results thus obtained, and the judgment of the teacher based on actual school performance. No one would admit that any group intelligence test can give the final word as to the learning ability of any individual, yet there is without doubt, a strong probability that those rating relatively low on a group test are of relatively low native capacity, and the accumulated data prove that a child who rates relatively high is almost certain to possess a high degree of mental ability.

After a careful study of the problem, the supervisory staff at Xenia, Ohio, adopted the plan of grouping according to intelligence ratings and demonstrated ability. It was believed the plan would afford the brighter pupils opportunity for development, and would relieve the average pupils of the class from the discouraging effect of the precocious on the one hand, and the habitually slow on the other. At the same time, the plan provided the slow pupils with opportunity for the fullest development of their intellectual life.

At the close of the school year in June, 1921, those promoted to the eighth year grade, were divided into three groups—arranged according to Terman Intelligence scores, modified to some extent, by the judgment of teachers based on school achievement during the year just ended. Those promoted to the seventh year grade were classified into three groups according to the in-

telligence quotient obtained by the Haggerty Delta-Two, Test.

After the number for each section was determined, those who were to compose the best group were counted off from those rating highest, the number desired for the next best section counted off from those rating next highest, and so on, for the entire grade.

At the close of the second month of the present school year, it was thought wise to modify the above plan, by a re-classification based on actual achievement as indicated by the various tests and estimates given during this period of time.

Every pupil was given to understand that this grouping was not permanent, but at the end of another two months a re-classification would again be made, and those who had found themselves placed in a lower group would have the opportunity to regain their former places or advance still higher.

When the first re-grouping was made on the basis of demonstrated ability to do school work, it was found that many changes would necessarily take place, and some surprising results were noted. About one-half of both seventh and eighth grade pupils remained in groups to which they had been assigned on the basis of intelligence ratings, while the remainder were placed in lower or higher sections.

At the close of the fourth month, when another re-classification was effected on the basis of ability to achieve school progress, it was interesting to note that fewer changes were to be made, a much larger per cent retaining their places in previously assigned groups.

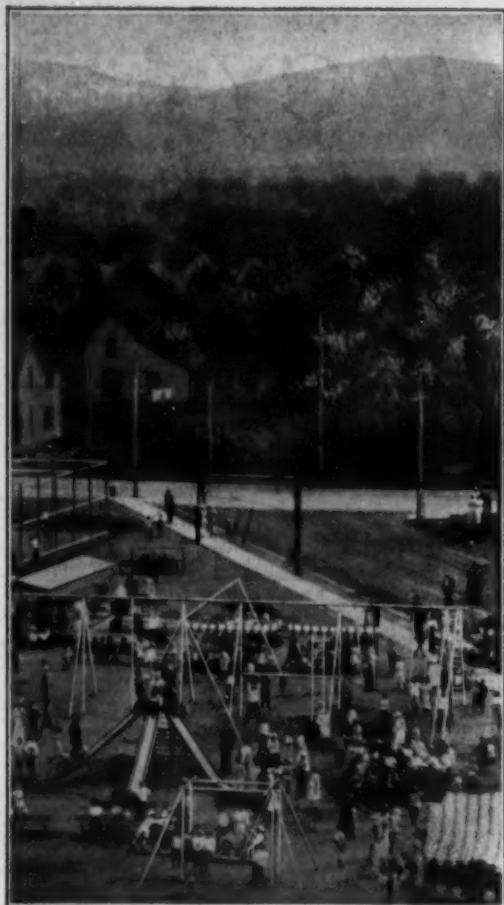
Seventh Grade.

	Remained in same group	Moved to higher group	Moved to lower group
First re-grouping..	51%	24%	25%
Second re-grouping.	73%	16%	11%

Eighth Grade.

	Remained in same group	Moved to higher group	Moved to lower group
First re-grouping..	56%	24%	20%
Second re-grouping.	77%	12%	11%

In taking a general survey of the present grouping of both Seventh and Eighth grades, it



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is noticed first, that the ability classification by group tests, corresponds to a certain extent with the present grouping based upon actual school accomplishment. A few exceptions are to be found where a pupil of comparatively low intelligence rating, has demonstrated ability sufficiently great to place him in one of the higher groups; but on the whole the group intelligence rating corroborates in a large measure what the teachers after four months' experience, have been able to discover about the relative ability of the children to do school work.

ENTER INTO COOPERATIVE AGREEMENT.

The board of education at Berkeley, California, has approved a contract between the University of California and the board, in which the two parties have agreed to maintain and operate as a part of the school system, a school to be known as the University Elementary School. The following terms of agreement have been adopted:

1. The board of education shall furnish and maintain an elementary school plant, consisting of grounds and building, and equipment, suitably appointed and adapted for the education of kindergarten children and those of the first six grades of the elementary schools. The board further agrees to supply such instructional materials and supplies for the use of the school, in such amounts and kinds as are regularly supplied to other schools of corresponding size in the city. It is also agreed that such modifications and furniture, equipment and supplies as may be desired by the University shall be furnished, provided the expense of such changes and additions are entirely borne by the University.

2. The board must supply at scheduled salaries as are in effect in the schools, an educational staff and janitor service for the operation of the school, in such numbers as these same officers are supplied to the other schools. The educational staff shall be chosen upon the recommendation of the superintendent of schools from lists of desirable candidates agreed upon by the University and the Superintendent of Schools. All appointments to positions in the University Elementary School shall be regarded as tentative until experience in service leads to nomination for more permanent appointment.

3. The University shall take charge of the educational operation and direction of the school under the terms of the agreement, supplementing the educational staff with such additional supervisory officers and technical experts as it may deem necessary, to develop and maintain the school and the educational facilities and opportunities provided at a high level of efficiency, and to insure their serving the purpose of providing facilities for training expert teachers, supervisors, and educational administrators, provided the entire expense for such staff and for any technical experts required, shall be met by the University, except as otherwise provided. The University agrees that in addition to the salaries paid by the board to the educational staff appointed by them, the University shall provide an additional salary of not less than \$200 and not more than \$500 per annum for each teacher appointed. The University further agrees to provide not less than \$3,000 toward the annual salary of the supervising principal of the school, appointed as one of the educational staff, and not less than \$500 per annum for the salary of a clerk to the supervising principal. The total amount to be contributed by the University for all of these purposes shall not exceed \$10,000 per annum.

4. In event that the per capita cost paid by the board for maintaining and operating the University Elementary School falls below the average per capita cost of other schools, it is agreed that the city and the school district shall reimburse the University at the end of each fiscal year in the amount of the difference.

5. It is further agreed by the University that a list of all administrators, officers, supervisors, and technical experts who may be assigned to duty in the school, or whom may be extended any official relation to the school, shall be communicated to the board through the superintendent of schools, with the understanding that no person will be given a relation to the school who is not acceptable to the board of the Berkeley schools and to the superintendent of the same.

6. The University agrees that nothing shall be undertaken or done which shall interfere with the school's serving satisfactorily and efficiently all pupils who shall regularly be served by the school, if operated simply as one of the

grammar schools of the Berkeley system. It is further agreed that all changes as they may be projected by the University from time to time, tending to effect or modify the course of study, the methods of teaching, the rules and regulations and other details, as they are in effect in the schools, shall be communicated in writing to the Superintendent.

7. It is mutually agreed that the contract shall be cancelled at the end of any school year, provided notice of intention to cancel same shall be filed in writing by either party not later than March first of any school year.

8. It is further mutually agreed that as soon as practicable, after the contract is in effect, the necessary steps shall be taken to organize and put into operation the University Elementary school as provided under the terms of the agreement.

ADMINISTRATION NOTES.

—Big Spring, Tex. The Ayer tests in spelling, writing and reading have been given in the schools this year.

—Rochester, Minn. Five special help rooms are maintained to take care of the slow and backward pupils. A room for the deaf has been provided with an enrollment of seven pupils.

—A department of educational research has been established as a part of the Durham, North Carolina schools. The department has attempted to group pupils by means of standard educational tests and measurements, supplemented by the opinion of the teachers. The purpose of the tests is to classify children into grades or groups according to ability in the several subjects, and to stimulate all children to greater effort. The tests provide a fair basis for comparing one group with another, one grade with another, or one child with another. Where tests have been used successfully in some places, children have been found to make twice the normal amount of progress.

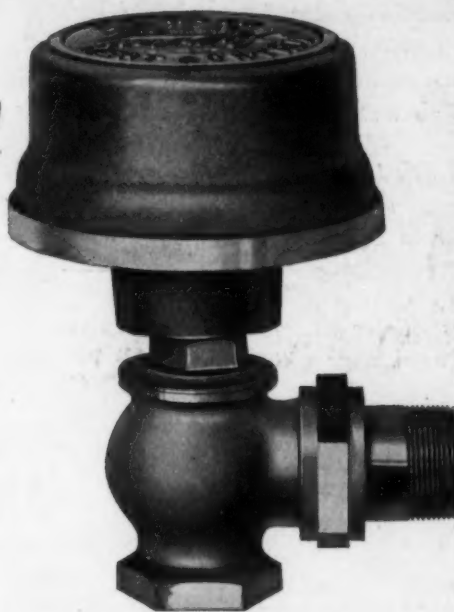
—Spokane, Wash. The school board has placed a strict censorship on motion pictures shown in the schools as a result of objections to some pictures shown. It was pointed out that some of the objectionable pictures might have slipped through when principals had relied on the recommendation of some outside person.

(Concluded on Page 79)

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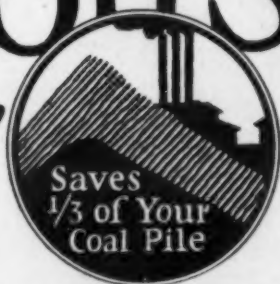
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Thermostats in each room regulate radiating units to maintain the "set" temperature of each room individually. Automatic regulation of heating source, according to heat demand of all radiating units means a great economy of fuel—a saving of as much as one-third your coal costs.

Johnson System

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No Repairs on the Laboratory Drain Lines of these Schools

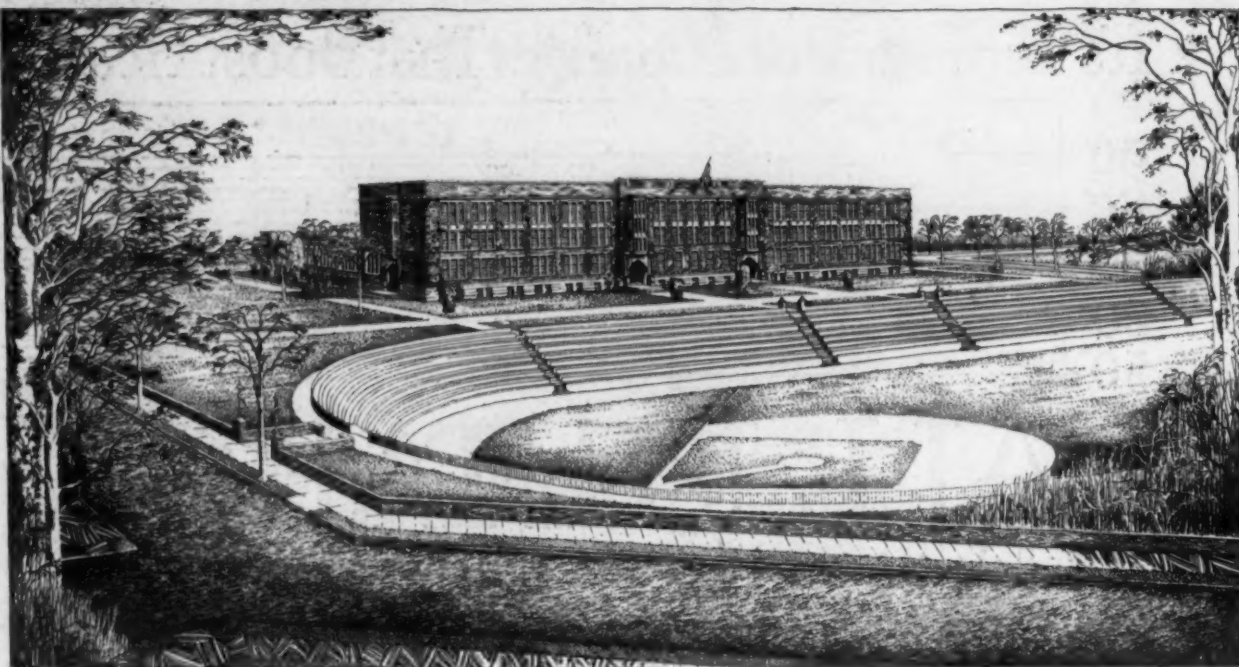
These two Junior High Schools, built in Cleveland in 1921, are replicas one of the other, and embody the best of modern school equipment.

They are designed for a service of years and years to come.

The drain lines from the laboratories are of Duriron, the metal that is unaffected by acids, and so there is no weak spot in the plumbing installation.

No matter how long these schools may stand, the Duriron Drain Lines will OUTLAST them.

No repairs will be necessary, and no damage will be done to the buildings.



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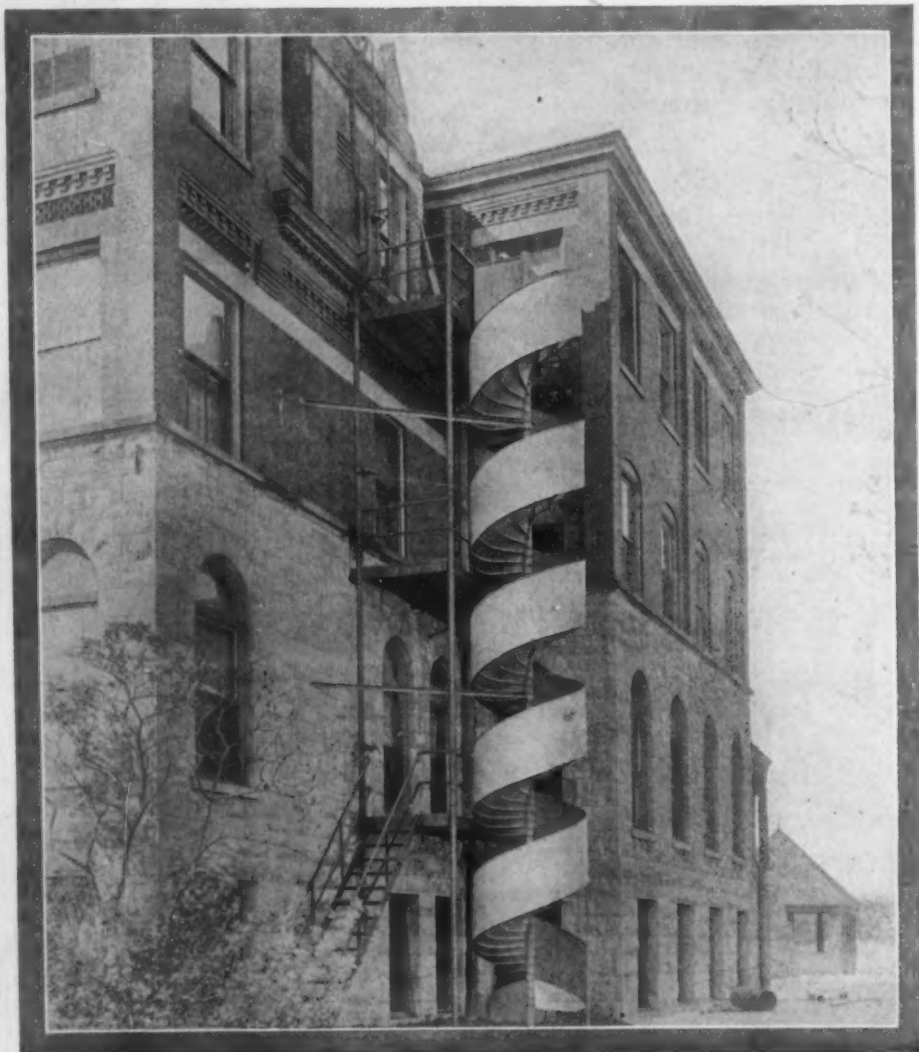
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2391-G

(Concluded from Page 76)

—Groveland, Mass. The board has adopted a policy not to sound the no-school signal on stormy days. Hereafter, schools will be kept open and parents will assume the responsibility of keeping the children at home in inclement weather.

—Augusta, Me. Upon the recommendation of the superintendent, the board has ordered a general survey of the public-school system as a means of better approaching the future building policy of the city. The survey will be in charge of Prof. Alexander J. Inglis of the Harvard University School of Education, who will have associated with him Prof. Henry W. Holmes, Prof. George A. Mirick and Prof. L. O. Cummings, also of Harvard. The survey will include a study of the health, comfort and safety of the pupils, sites and types of future buildings, cost of operation, together with suggestions for economies, and a study of the general efficiency of the organization and supervision of the school system.

—Jonesboro, Tenn. The school term has been fixed at six months. The board has voted \$5,000 for the erection of a new school upon condition that the citizens raise a like amount to assure a \$10,000 building.

—The school board of Rochester, N. Y., has ruled that high school students who fail of promotion in two major subjects in any semester, may be admitted to school for the next semester on probation. Failure to reach a passing grade in two subjects in any month thereafter debars them from school for the remainder of the semester. In the opinion of the board, it is an injustice to the pupil, the home and the community to retain in the school any boy or girl who cannot or will not, do work sufficiently well to secure returns commensurate with the time and money spent.

—Medford, Mass. A special class for retarded children has been opened in the Lincoln School.

—The system of visual education used in the public schools of New York City will be followed to a large extent in the Indianapolis schools, according to the head of the visual education department, who has recently made a study of the system adopted in New York City.

—In line with a business policy adopted by the city council of Vallejo, California, the board

of education has been billed for water used in the public schools. Readings made of meters installed in the eight elementary schools of the city, show that \$228 worth of water has been used in three months. As a result, meters have been ordered installed in all schools, both public and private.

—Supt. F. V. Yeager of Spokane, County, Washington, has recently ruled that the Spokane schoolboard had a right to exclude a pupil from one of the grade schools because of inability to do the work of the regular class. In giving his decision, however, Supt. Yeager pointed out that the word "defective" should not be applied to a child who is backward in school work, because such a word is misleading and places a blight on a child.

—Supt. Frank W. Ballou of Washington, D. C., has recently advocated the placing of the schools in the hands of a board of education absolutely independent from the city government and with independent power of taxation. Mr. Ballou points out that the best schools in the country have been developed under independent boards with taxing powers.

—Minneapolis, Minn. The board of education, with the permission of the police department, has sworn in the janitors as special policemen to act as traffic men at street crossings near school buildings.

—Nearly \$4,000,000 was distributed recently to a large number of cities and towns throughout the state of Massachusetts under the school fund law enacted two years ago. In the distribution, Lawrence received \$72,857 and Lowell received \$72,791.

—School directors have no power to compel medical attention of school children, unless they suffer from an infectious or contagious disease, according to a ruling of Attorney General Thompson of the state of Washington.

Trenton, Mo. The increased high school attendance has made it necessary to concentrate the high school freshmen and the pupils of the seventh, eighth and ninth grades in the Central Junior High School. The plan releases much needed space in the senior high school and makes possible the unifying of the work for the three high school grades.

—The evening high school at Springfield, O., has an enrollment of more than 900 students for the present year. Several new subjects were added to the course, among them being brick laying and printing. Other interesting subjects offered are machine shop practice, automobile work, telegraphy, commercial work and domestic arts.

A normal school has also been established as an aid to students who wish to become teachers, and who do not desire to leave home to take the training.

A school for crippled children is maintained in a portable building, which has been especially equipped for the education and comfort of these children.

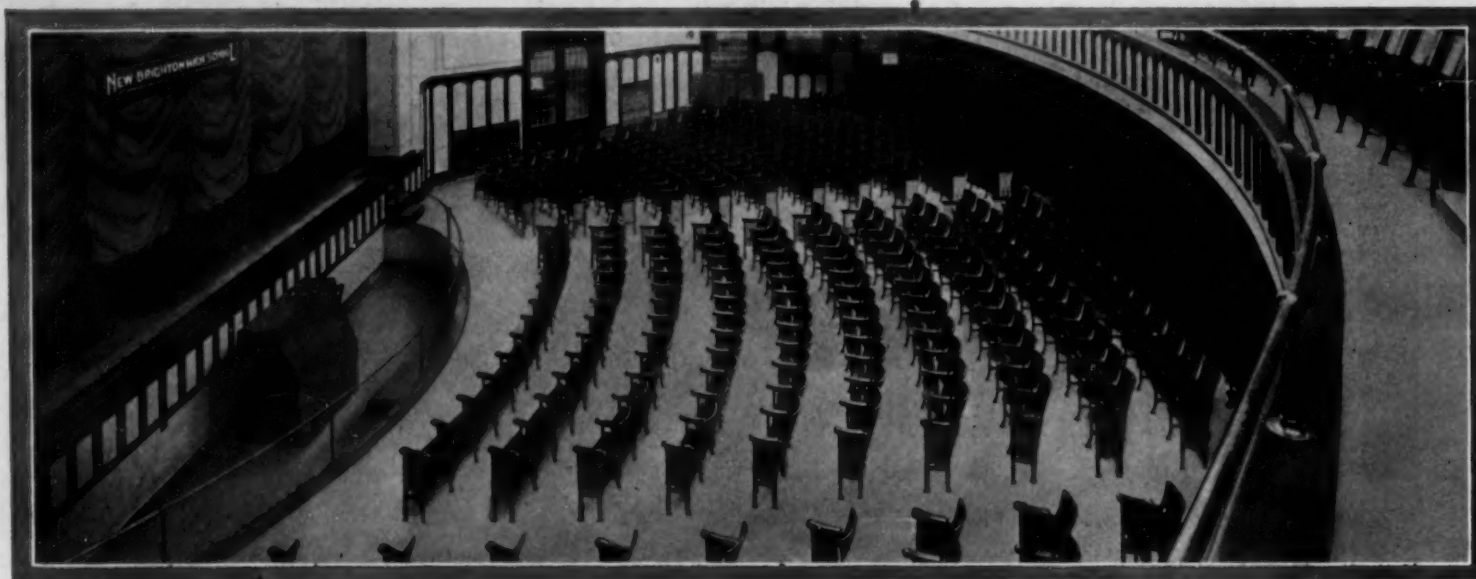
—The failure of an extra tax levy has prompted the Cincinnati School Board to retrench all along the line. The statement is made that "Little hope is held out, however, that any method can be found for saving so large an amount as is involved in the loss of the extra levy without seriously crippling the efficiency of the schools."

—Mr. Horace F. Bates, for five years principal of the high school at Maynard, Mass., has assumed his duties as superintendent of the Somerset-Swansea, Mass., district.

The Philadelphia Board of Education recently marketed \$2,000,000 worth of school bonds at the rate of 105.33. There were sixteen bidders.

—"School control in the various parts of the country often changes so frequently that work started by one body is overturned by another before it has had a thorough trial," said President Davis of Hunter College recently. "Systems are half-completed, half-tried: All of which works to the disadvantage of the educational system."

The New York Bureau of Municipal Research inflicts this criticism upon the New Orleans school system: "The organization of the school board and its executive staff is faulty, in that the board takes into its own hands and seeks to administer too much purely administrative or executive detail through its several sub-committees; that it does not operate through sufficiently empowered executive employees, or have clearly defined delegation of authority and chain of control and responsibility."



Auditorium of New Brighton, Pa., High School, W. G. Eckles, Archt., New Castle, Pa., representing Mr. Eckles' 8th use of Marbleloid Flooring.

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RULES AND REGULATIONS.

—Portland, Ore. The board has adopted rules providing that vice-principals and deans shall teach three periods daily. All others, including department heads, must teach the full time required for the subject taught. Heads of departments of English in the several schools are required to teach one period daily for supervision. The subject taught by any teacher three or four periods each day determines her classification.

—The board of education of Chicago has adopted a rule providing that the high school buildings shall be open for school purposes on regular school days, between the hours of 8:00 A. M. and 4:45 P. M. Buildings to be used outside of the hours named, on Saturdays, Sundays, holidays or vacation periods, may only be used where a permit has been issued and the regular overtime rate prevails.

—The Minneapolis board of education has warned owners of neighborhood stores and other places frequented by school children that they must keep their places in a decent, respectable condition, free from undesirable influences. Failure to heed the warning will make it necessary to prohibit pupils patronizing such stores both during school hours, and while going to or returning from school. The warning became necessary when it became known that some of these places permitted games of chance and smoking by pupils.

—Minneapolis, Minn. The board has adopted a rule requiring that the lunchroom supervisor, in purchasing candy for the school lunchroom, shall give first preference to local manufacturers and second preference to local jobbers.

—Seattle, Wash. The board has adopted a rule to govern the disposition of unclaimed monies found in the schools. It has been ordered that in case of the finding of money, 25 per cent of the amount shall be turned over to the finder, and the remaining 75 per cent shall be placed in the local fund of the school to be used for school purposes.

HIGH SCHOOL ADMINISTRATION.

—Solvay, N. Y. Extension education has been undertaken for the first time this year, under the direction of Supt. J. P. Sherrard, aided by Mr.

C. H. Atwood, principal. The high school offers courses in elementary and advanced dress making, millinery, home nursing, shorthand and typewriting, calculator practice, bookkeeping, printing, wood working, cabinet making, pattern making and machine shop practice.

Americanization work has been very successful. Home classes, factory classes and evening courses have been conducted for the benefit of foreigners who desire to read, write and speak the English language, and who want to become familiar with United States history and civics preparatory to becoming citizens.

—Durham, N. C. During the past few years an experienced high school teacher has acted as girls' advisor, giving all her time to personal work with the girl students of the school and with many of the recent graduates.

—Providence, R. I. A committee of local businessmen has been appointed to direct a movement for raising money for a scholarship fund for boys and girls unable to obtain a high school education. It is estimated that a fund capable of yielding an annual income of \$5,000 will be adequate to meet the situation. The plan will be in operation with the opening of the spring term when at least four scholarships will be given out. A scholarship of one term will be \$50, and for one year of two terms, \$100.

—Chicago, Ill. A definite stand against more than a six-hour school day has been taken by the Chicago federation of women high school teachers and the federation of men teachers in an emergency bulletin recently issued by these societies.

—The girl students of the Cony High School, at Portland, Me., have adopted resolutions placing a ban on cosmetics, immodest dresses and dresses made of expensive and elaborate materials. The action is the first step toward the establishment of a standard high school uniform.

SCHOOL LAW.

School District Government.

The submission of a bond issue to electors of a high school district at a polling place in one county was not rendered invalid, under the California constitution, art. 2, §1, and the California Pol. code, §§1083, 1598, 1600, because electors re-

siding in an adjoining county were denied the right to vote, where votes in favor of bonds were not sufficient without them, and their votes could not have changed the result.—Callistoga Joint Union High School Dist. v. Webber, 200 P. 1061, Cal. App.

Teachers.

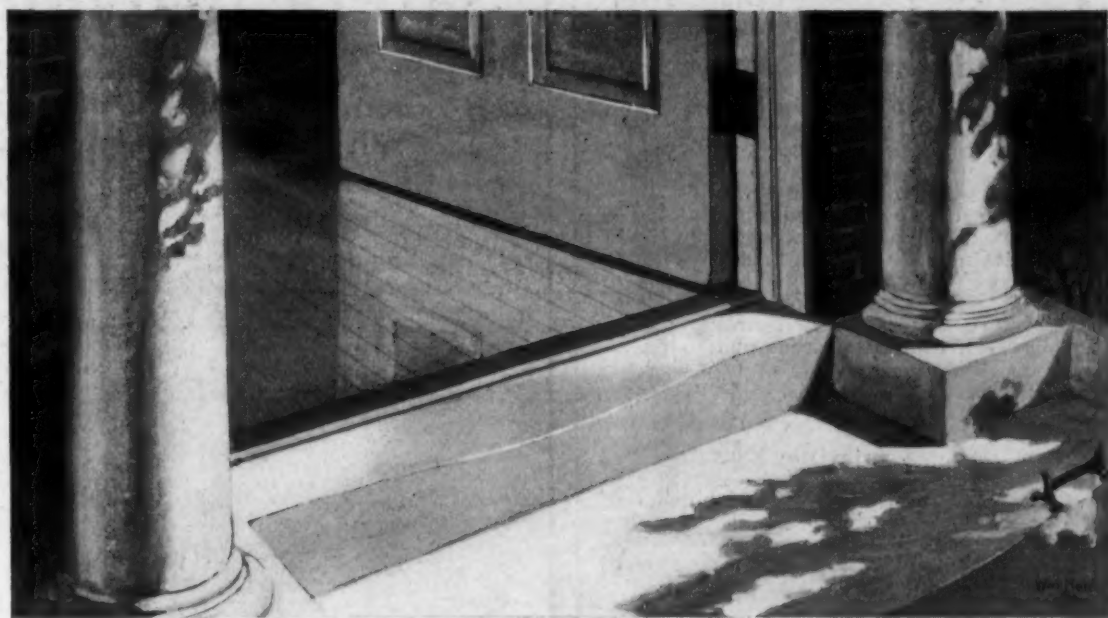
In view of Burn's annotated statutes of Indiana for 1914, §760, delegating to health officials the power to close schools to prevent and stay epidemics, a teacher cannot recover wages for the time during which her school was closed by their order because of an epidemic of influenza, despite the rule that no deduction can be made from a teacher's salary in such case, in the absence of a special provision in the contract of employment; such contract being deemed to have been made with reference to the law, the act of closing the school being beyond control of the township trustees, and the performance of the contract being impossible.—Gregg School Twp., Morgan County, v. Hinshaw, 132 N. E. 586, Ind. App.

An Important School Board Decision.

A taxpayer sought to enjoin the board of education at Middlesboro, Kentucky from holding an election on the question of issuing \$150,000 of bonds for school purpose. The plaintiff conceded that all steps in the matter of ordering, calling and advertising the bond election had been taken in strict compliance with the law, but that the school board was without power to incur an indebtedness that was a component part of the city of Middlesboro and which indebtedness would be in excess of the limits set by sections 157 and 158 of the Constitution.

In answer to this contention the Court of Appeals of Kentucky held that the indebtedness incurred for school purposes is not a component part of the city debt inasmuch as the school system, under the law, is a separate corporation and not subject to the limitations established. The petition was denied.

Kenmore, O. The board has sold \$200,000 in bonds the proceeds to be used in the erection of a new school. The building is the fourth to be erected in three years and is made necessary by the rapid increase in school population.



Why MAPLE outwears STONE

Every shoe in the thousands that strike a stone sill, grinds off its toll of fine particles in an unchanging friction. But Maple builds up its own resistance to wear, because each passing foot increases the polish on this tough-fibred, tight-grained wood, making it smoother and smoother. Because of such wearing qualities, Maple is used for floors in schools far more than any other wood. It also gives greatest cleanliness, for its hard, smooth, crack-free surface offers no lodging place for germs and dirt.

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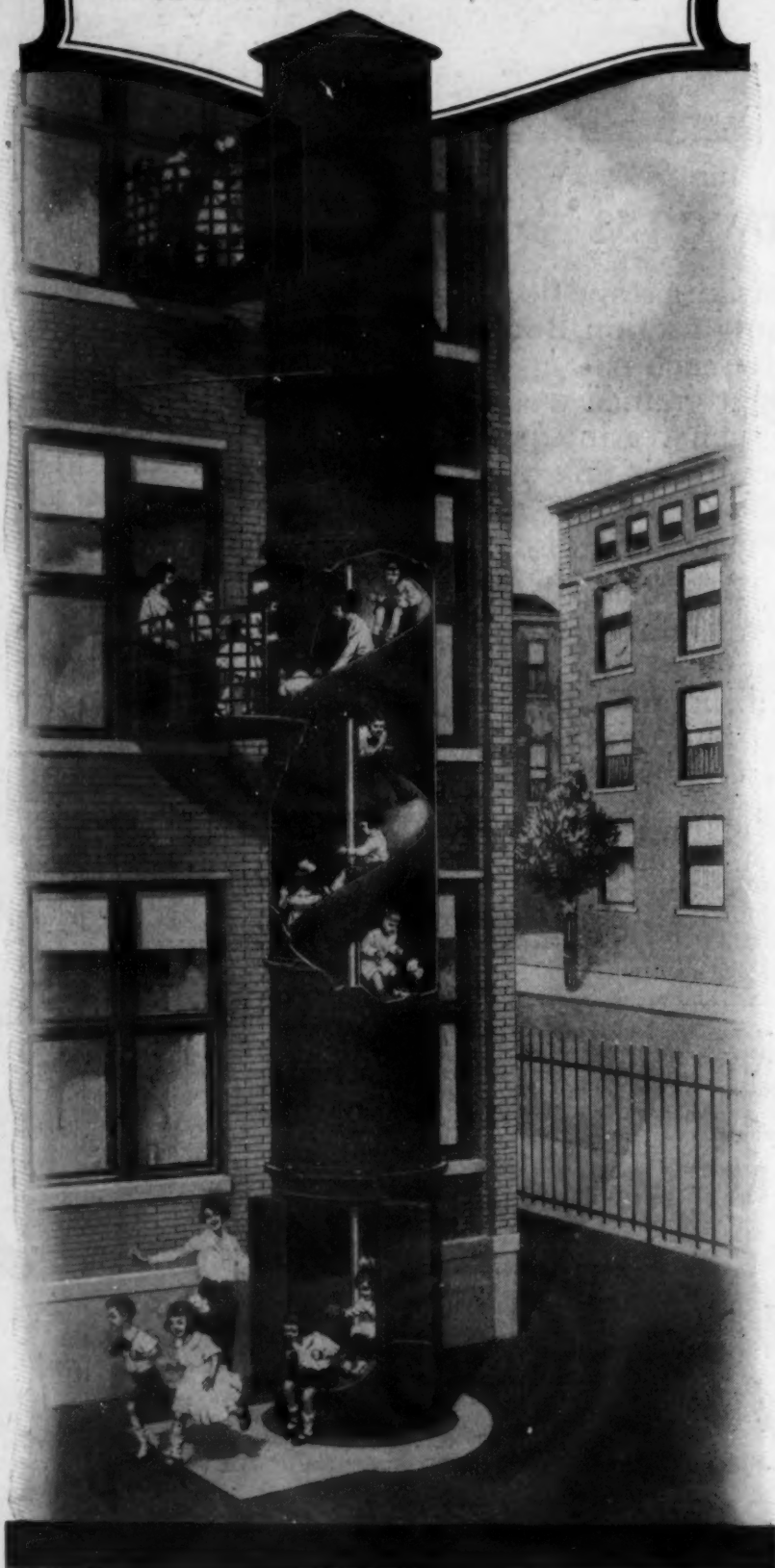
We are certain that you would not if you knew the dangers that lurk in a school building not thus equipped. For fire is no respecter of time or conditions and there is no such thing as a fireproof school building. Your's may be the next.

Have you assured 100 per cent safety for your school children by the installation of a Dow Spiral Slide Fire Escape? Write for complete information today to

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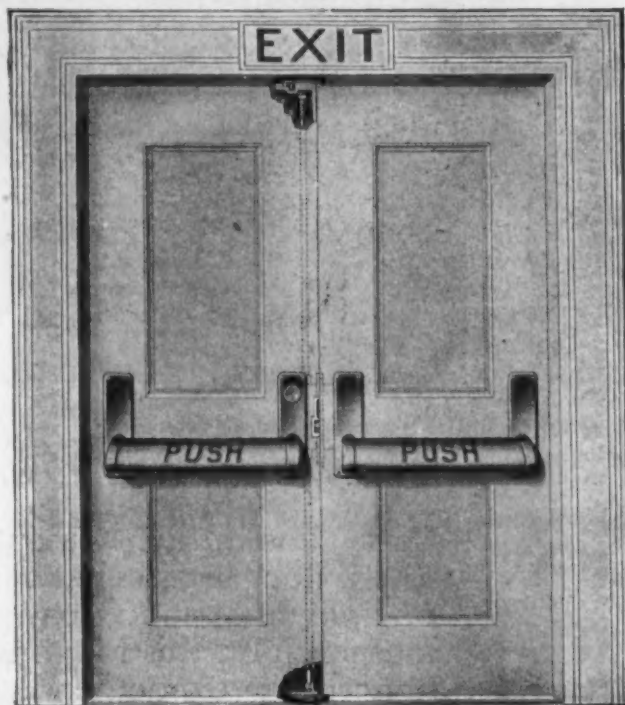
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Quick exit assured Safety provided

Members of school boards and other officials on whom the responsibility rests should make full provision for protection to life in case of panic by the use of this safety device.



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as illustrated above, are attractive in appearance, strong in construction and quick in action. The construction is such that in operating the push bar the hands or arms cannot be caught between the bar and the door.

They have a wide push bar which projects only 2½ inches from the surface of the door, permitting the door to swing wide open so as not to obstruct passage through the doorway. Slight pressure on the bar at any point will release the bolts instantly. All edges and corners on the bars and brackets are carefully rounded, eliminating all possibility of wearing apparel becoming accidentally caught.

Sargent Fire Exit Door Bolts,
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DAHLSTROM FIRE EXIT DOOR
LONGFELLOW SCHOOL, PITTSBURGH, PA.

Firesafe Doors are Lasting

otherwise, as soon as they began to deteriorate, they would begin to be unsafe.

In practically all States, the law requires dependable exit doors. If these were not important openings for the scholars' safety, there would be no law governing them.

Why not use a door that will always be safe? A door that has welded, not soldered joints. A door with a baked-on enamel, not an oven dried finish. In other words, an ingot iron door that must melt before a fire will be communicated through it. Such a door is a Dahlstrom hollow metal, standard construction, fire exit door.

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Teachers and Administration

COOPERATIVE SUPERVISION

—Supt. H. J. Stockton of Johnstown, Pa., has recently reported to the board on a method of cooperative supervision which has been worked out in the junior high schools. Teachers in a field of related subjects have been formed into what is known as a subject group. They elect one of their number as the leader of the group, technically known as the subject chairman. An outline of the plan as it has been worked out by the superintendent and principals of these schools follows:

I. Duties of the Junior High School Subject Chairman:

1. Preside at all monthly meetings of teachers of subject groups.
2. Prepare program for professional study with the approval of the principal for the membership of the subject group. Suggested material. Subject journal or periodical, professional book, classroom demonstration, special paper or discussion, round table topics, outside speaker.
3. Discuss with group outlines of work for coming month and prepare or assign to members of the group for preparation outlines of work in each term of the subject. The chairman shall be responsible for the prompt receipt of all outlines by the principal at least one week before the beginning of each month.
4. Each teacher of the group, two days before the end of the month, shall submit a statement of work accomplished to the subject chairman, who shall transmit the same to the principal. This statement shall give the name of the text, the pages covered, special projects, supplementary texts or readings, experiments, number and nature of language exercises, notebook exercises, etc.

5. The subject chairman, at the end of the month, shall be responsible for the orderly circulation of the name-lists among the teachers of the groups, and shall strive for a high degree of promptness and accuracy in the recording of grades on said lists.

6. At the end of the semester the work accomplished in each term of each subject shall be summarized. These summaries shall be exchanged by the chairman of the Junior High Schools and a copy shall be sent to the superintendent and the proper head of department in the Senior High School.

II. Manner of Election.

1. The subject chairman shall be elected annually by the teachers of the subject group. The principal shall provide the teachers with a group eligible list on which the teachers of a group may mark their choice and transmit their ballots to the office clerk.

III. Subjects for Which There Shall Be a Chairman.

1. Social Science, (a) Vocational Civics, (b) History, (c) Community Civics.
2. English.
3. Mathematics, (a) academic and commercial.
4. Science, (a) geography, (b) health science, (c) general science.
5. Vocational Subjects.
6. Foreign languages.

The merits of the Subject Group Plan of Supervision as worked out in the Junior High Schools may be summed up as follows:

- (1) It is a democratic form of organization.
- (2) Each subject forms a natural unit of organization.
- (3) The plan localizes and stimulates professional interests in the particular subjects.
- (4) The plan affords a means for smoothly coordinating through subject chairman the various subjects of the Junior High School.
- (5) It provides ready and effective channel for the principal to realize the objectives of the school.
- (6) The subject chairmen are administrative units. The rigidity and some of the other objectionable features of the head of a department plan are obviated. The plan also, is commendable in that it does not create an elaborate hierarchy of administration on a salaried basis.

TEACHERS AND ADMINISTRATION.

—Green Bay, Wis. The board of education has authorized the holding of a six weeks' summer school during the coming vacation. The work is being undertaken primarily for the benefit of the local teachers of the elementary and junior high school grades. To date, 92 of these teachers have signed for attendance this summer. The board pays the entire expense of the school, so the teachers are asked to contribute only their time. Credit for work done at the Green Bay Summer School is allowed by Ripon College, Milwaukee-Downer College, Lawrence College, and by some of the normal schools under certain conditions.

—School teachers in Idaho have a right to punish pupils with severity in proportion to the offense, according to a recent decision of the Probate Court, at Sand Point. Mr. H. O. Wiswell, a teacher at Granite, was charged with assault and battery for slapping a pupil across the face. The court held that the punishment was justified inasmuch as the student had been boisterous, profane and had declined to recognize authority.

A series of educational mental tests in the schools of nine Indiana counties was conducted from January 16 to 20, to determine the average mental standing of the pupils in the state. The results of the tests will be used as a basis for future educational measures, and the giving of the tests is part of a general school survey.

—Central Falls, R. I. Intelligence tests, similar to the psychological examinations given college students, have been used in the local schools to determine the mental status of the subnormal students. In a recent test, out of 52 pupils, all of whom had been listed as backward, 35 were found to possess average intelligence.

—Increases in Illinois school teachers' salaries from 1919 to 1921, which in some counties exceeded 75 per cent, have been announced by the State Department of Public Instruction. The highest percentage of increase was given by Wayne County, which averaged 77.4 per cent.

—Pawtucket, R. I. The school board has refused to grant the requests of the grade and high school teachers for increases in salary. An adjustment of wages for the high school teachers will be made in the near future.

Scientific School Budgeting for the Small City

The Kinston School Budget

At the suggestion of Mr. William Hayes, chairman of the school board at Kinston, N. C., the school budget for the year 1921-22 has been prepared by Miss Charlotte Mewborn, secretary to the superintendent of schools, Mr. K. R. Curtis. The budget as it has been worked out, has been fashioned after the plans advocated by widely acknowledged experts in school administration.

As a result of study, experience and observation, an attempt was made to analyze and justify each item on the basis of true educational service. By reading the budget which follows, it will be seen that the finances are being handled in accord with the best analyses of school accounting and a truly scientific form of distribution.

An attempt has been made to compare the different items on the Kinston budget with those of some of the cities given by Dr. Strayer in his recent study of budget control and city school finances.

Kinston School Budget for 1921-22.

Total Receipts for Year.

From city of Kinston.....\$ 47,935.05
From county and state..... 57,927.33

Total Receipts\$105,862.38

Total Expenses for Year.

I. Expenses of General Control.....\$ 6,720.00
II. Expenses of Instruction..... 82,364.99
III. Expenses of Operation..... 7,223.16
IV. Expenses of Maintenance..... 2,565.00
V. Expenses of Fixed Charges..... 858.82
VI. Expenses of Debt Service..... 4,235.00
VII. Expenses of Capital Outlay..... 950.00
VIII. Expenses of Auxiliary Agencies 1,000.00
IX. Sundries 275.00

Total Expenses for the Year.....\$106,191.97

I. Expenses of General Control.

Salary of the Superintendent.....\$4,000.00
Salary of Treasurer 200.00
Salary of Secretary 1,500.00
Legal Services 250.00
Supplies—Stationery, postage, telephone and telegraph 420.00
Traveling Expenses 350.00

Total Expenses of General Control.....\$6,720.00

II. Expenses of Instruction.

Salaries of Principals—
White\$ 6,100.00
Colored 990.00

Total \$ 7,090.00

Salaries of Teachers—
White\$65,774.99
Colored 9,225.00

Total 74,999.99

Other Expenses of Teachers—textbooks, etc. 125.00

Supplies used in instruction (domestic science) 150.00

Total Expenses of Instruction..... \$82,364.99

III. Expenses of Operation.

Wages of Janitors\$3,200.00
Fuel 2,750.00
Janitors' Supplies 975.00
Express, freight, drayage 298.16

Total Expenses of Operation.....\$7,223.16

IV. Expenses of Maintenance.

Repairs\$2,565.00

V. Expenses of Fixed Charges.

Insurance\$ 858.82

VI. Expenses of Debt Service.

Interest on Short-term Loans.....\$2,700.00
Refunds to state (6,000 loan)..... 1,535.00

Total Expenses of Debt Service.....\$4,235.00

VII. Expenses of Capital Outlay.

Equipment\$ 950.00

VIII. Expenses of Auxiliary Agencies.

Books for Library\$1,000.00

IX. Sundries 275.00

Note: At the beginning of the school year the liabilities were \$17,250, according to the auditor's report. To cover this amount, the state made a special loan of \$6,000 to be returned in four installments, and the county was due us \$12,630.

It is interesting to note how the per cent of expenditures for Kinston compares with the median per cent of expenditures in some of the other cities in Dr. Strayer's report based on the expenditures for 1920-21. (See Table I.)

Table I. Total Expenditure Distributed among the Eight Items of Expenditure.

Cities	Median Per Cent of Total Expenditures Each Item.							
	General Control	Instructional Service	Operation of Plant	Maintenance of Plant	Fixed Charges	Debt Service	Capital Outlay	Auxiliary Agencies
Small Southern ..	5.7	65.5	8.7	3.1	1.0	2.6	3.4	0.5
Kinston 21-22	6.3	77.5	6.8	2.4	0.8	3.9	0.8	0.9
Mid. Southern	2.9	64.7	6.9	2.9	1.1	3.7	9.6	1.0
Kinston 21-22	6.3	77.5	6.8	2.4	0.8	3.9	0.8	0.9
Large Southern ..	2.1	74.0	10.1	3.0	0.5	0.3	4.1	0.9
Kinston 21-22	6.3	77.5	6.8	2.4	0.8	3.9	0.8	0.9
All Southern	3.5	67.0	8.3	3.0	1.0	1.3	4.8	0.9
Kinston 21-22	6.3	77.5	6.8	2.4	0.8	3.9	0.8	0.9
All cities	3.5	61.1	10.1	3.3	0.9	6.7	5.5	1.3
Kinston 21-22	6.3	77.5	6.8	2.4	0.8	3.9	0.8	0.9

Small Cities,—from 8,000 to 30,000 population.
Middle Cities,—from 30,000 to 100,000 population.
Large Cities,—over 100,000 population.
Southern—Cities of Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia,

Table II. Current Expense Distribution Among Six Items of Current Expense.

Cities	General Control	Instructional Service	Operation of Plant	Maintenance of Plant	Fixed Charges	Auxiliary Agencies
Small Southern	6.4	74.6	9.7	3.7	1.1	0.6
Kinston 20-21	7.5	76.0	11.6	3.6	0.8	0.3
Kinston 21-22	6.6	81.5	7.1	2.5	0.8	0.9
Middle Southern	3.4	79.2	9.4	3.7	1.5	1.4
Kinston 20-22	7.5	76.0	11.6	3.6	0.8	0.3
Kinston 21-22	6.6	81.5	7.1	2.5	0.8	0.9
Large Southern	2.2	82.8	10.5	3.3	0.5	0.9
Kinston 20-21	7.5	76.0	11.6	3.6	0.8	0.3
Kinston 21-22	6.6	81.5	7.1	2.5	0.8	0.9
All Southern	4.8	78.0	9.8	3.4	1.3	1.1
Kinston 20-21	7.5	76.0	11.6	3.6	0.8	0.3
Kinston 21-22	6.6	81.5	7.1	2.5	0.8	0.9
All Cities	4.4	74.3	12.8	4.1	1.1	1.7
Kinston 20-21	7.5	76.0	11.6	3.6	0.8	0.3
Kinston 21-22	6.6	81.5	7.1	2.5	0.8	0.9

Kentucky, Louisiana, Maryland, Mississippi, North Carolina, South Carolina, Tennessee, Texas, Virginia, West Virginia.
All cities,—375 cities from all sections of the United States.

In small cities the item of general control is always larger in per cent when compared with large cities. As the number of teachers increases, this per cent decreases. As the number of teachers increases, the small additional expense under general control is occasioned by employing extra clerical assistance for the office. In other words, the main item of expense under general control is made up by the employment of the professional head of the school system. The professional, academic and personal qualifications necessary to operate a system in a community of 15,000 are the same that are required to properly operate a system in a community of 45,000. Dr. Strayer finds that there is a very clear tendency for the per cent for general control to be higher in small cities.

In the second item, the instructional service, the per cent for Kinston is 81.5 which is greater than the median per cent for small southern cities, but this is as it should be since the greater part of the expenditure is for teachers' salaries and a large part of the taxpayers' money goes directly to the children in the schools. It

is considered complimentary by experts when a school board expends a large amount for teachers' salaries because the large salary attracts the good teacher.

The third item, operation of school plant, includes the wages of janitors and other employees, the cost of fuel, janitor supplies and the general care of the grounds. Kinston's per cent for this item is lower than the median per cent for each of the groups of cities given. This per cent is 7.1 as against 12.8 for all cities.

Maintenance includes the repair and replacement of equipment. Referring to Table II it is noted that Kinston is considerably lower than the cities mentioned. Although at first this might be considered in the schools' favor, it is noted that the condition of the equipment forces the conclusions that the comparison is a reflection.

The items under fixed charges, include pensions, rents, insurance, taxes, contributions and contingencies. Since Kinston schools have no pensions, rents, etc., and as this item includes

only insurance, it is lower than the average. Sooner or later pensions and contributions to certain objects will increase this item.

Kinston's per cent under the head of auxiliary agencies is made up entirely of the proposed appropriation of \$1,000 to the library. While this seems to place us in a pretty fair ratio with the other cities, it should be remembered that practically nothing has been appropriated for any of the auxiliary agencies in the past several years.

WHAT KIND OF A TEACHER?

(Continued from Page 48)

Thoroughness	2
Shorter day for primary.....	2
Lunch room	2
Man principal	
More books for home study	
Not so much home study	
More recreation	
Shorter hours	
More Teachers	
Better living conditions for teachers	
School library	
Separation of sexes	
More recreation for teachers	
Day begun with devotions	
Men teachers for boys over twelve	
More home study	
Improved conditions for lunch	
Saner regulations about going to toilet	

(Concluded on Page 87)



Frederick W. and Edwin B. Clark, Architects, Omaha, Nebraska.

THE New Technical and Commercial High School of Omaha—one of the finest and largest schools of its kind in America—a school, representative of the finest construction and superior quality of equipment—chose the Stromberg Time Systems against the field after a searching investigation.

Fifteen years of successful manufacture of electrically operated time systems used in thousands of America's foremost industrial institutions, has enabled us to produce time equipment of unsurpassed efficiency. Our ability to produce such superlative equipment had a logical and direct bearing on their decision. Many other well known schools use Stromberg Synchronized Time Systems.

We manufacture *complete* Secondary Clock and Bell Program Systems, embracing Self-Winding Master Clocks which insure perfect synchronization of time of any number of Secondary Clocks and Bells throughout the school; Secondary Clocks in round steel or square wood cases; Program Instruments, Bell Control Boards which permit of automatic or manual control of every bell in the school, etc.

Our School Engineering Department is at your disposal without obligation. Detailed specifications and full information gladly sent. Address—

School Engineering Dept.

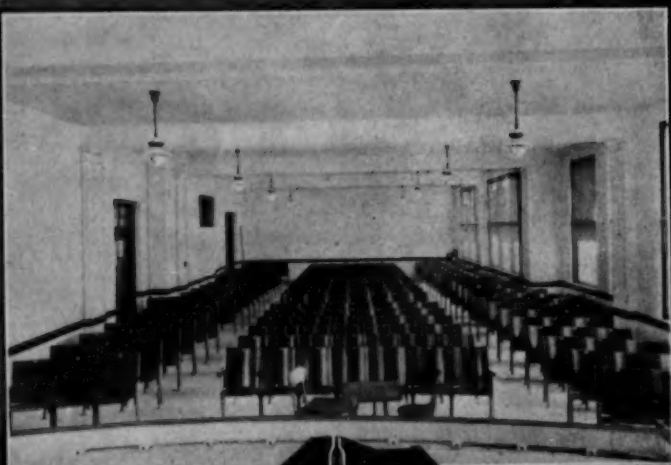
STROMBERG ELECTRIC COMPANY
858 McKinlock Bldg. Chicago, Ill.

Representatives in all Principal Cities



Above installation embraces 155 Secondary Clocks, Program Instruments, Bell Control Boards, etc., operating 255 separate bells on 12 schedules.

The Largest Exclusive Manufacturers of Electrically Operated Time Systems in the World



Two Decatur Schools Denzar Lighted

Two or more Denzar lighted schools in one city are not uncommon because the first installation usually sells the second. Such subsequent orders confirm our statement that Denzar is its own best salesman. Nothing quite equals an installation to show the real value of Denzar as school luminant.

The two views here shown are the auditorium and one of the classrooms of the Roach School at Decatur, Illinois. The auditorium is equipped with eight No. 800 Denzars, while the classroom has four No. 100 Denzars. All told 84 Denzars are installed in this school. When the new Roosevelt Junior High School was built in Decatur the Denzar lighting in the Roach School had a profound influence on the Board of Education, and as a result 276 Denzars and other Beardslee lighting equipment were ordered.

If you haven't any Denzar lighted schools in your city let us send sufficient Denzars to correctly light one classroom and show you the advantages of Denzar lighting. Ask for the new Denzar Catalog D-7.

Beardslee Chandelier Mfg. Co.
219 South Jefferson Street
Chicago,
Ill.



DEVOE

Leonardo da Vincis Observations vs: Chemical Reactions

DEVORE Products have been highly regarded for more years than this country has been a Republic! Father Time, the severest of judges, has set on them the seal of his approval.

But that is not all. Devoe School Colors, like all other Devoe Products, must pass the test-tube test. From the moment the raw material enters the plant till the finished product is sent out, it is subjected to constant chemical and physical tests.

So when you specify Devoe, you know that you are ordering colors that can be trusted—trusted to be brilliant, permanent, pure—trusted to give the student an opportunity to make the most of his skill.

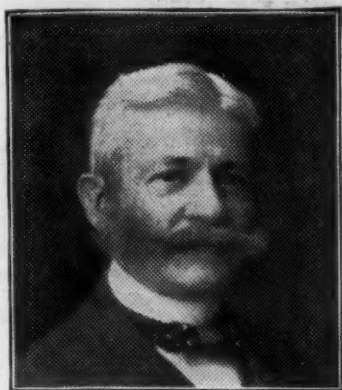


Devoe & Reynolds Co., Inc.

New York

Chicago





MAKE FREE TEXT BOOKS

Last Twice as Long and Cut in Half the Cost

per Book - per Pupil - per Year

Holden Book Covers

Accomplish this *Saving* in Thousands of Schools
because of the *Durability* and *Wearing Quality*
of their famous *Unfinished Leatherette Material*

THE HOLDEN PATENT BOOK COVER COMPANY

MILES C. HOLDEN, President

SPRINGFIELD, MASSACHUSETTS

(Concluded from Page 84)

Less red tape
Minimum salary of \$1800
Pupils classified in terms of capacities
Individual ownership of texts

Teacher.

No Pets 2
Teachers visit parents 2
Teacher not to use so much personality
Teacher to be more kind
Learn individual pupil's needs
Employ only southern teachers

Curriculum.

Manual training and industrial arts
More practical knowledge
Calisthenics
Individual character study and instruction
Junior citizenship
Better foundation reading
Bible, instruction, kindergarten

The large vote on the following deserves
special mention as indicative of the effect of re-
cent publicity:

Increased salaries for teachers.
New and larger buildings.
Sanitary drinking fountains.
Improved sanitary conditions.
Playground director.
Manual training and industrial arts.

Perhaps the most unusual and unique sug-
gestions are the following: (given just as they
were.)

1. Provide funds by tax on bond issue to
meet expenses on par with other institutions.
Make buildings and grounds a place where
teachers and pupils will love to go and regret to
leave. Teachers should not have to stand for
reelection each year.

2. I think there should be a connected series
of reading books, the best obtainable, properly
graded from the first to seventh grades and that
such books should teach great truths and
morals. My children have been compelled to use
books entirely unsuited to their grade and in-

tellect. One book might be about right; the
next too easy and then the next entirely too
hard. This all in one grade. Worst of all,
some of these books contained stories that were
nothing but "lies," impossible of belief to a
mature mind, perverting the mind of the child.
No great truth or moral could by any means be
learned from such trash.

I believe it a mistake to allow spelling to be
dropped from the higher grades unless it is
made thorough in the lower ones. I do not con-
sider the present method of teaching spelling
compares with that of the past. I will never
forget the green covered spelling book and how
I studied the words therein, trying to beat my
companions in "leaving off head" the most
times. I do not think any other method would
have induced me to study spelling lessons with
so much determination to learn how to spell cor-
rectly. Writing is another subject that should
receive more attention. The business world
wants better penmanship.

3. Teachers use too much personality.
4. Employ only southern teachers.

In conclusion the general results of this
study need not be further summarized except to
refer to the effect of the questionnaire upon the
thinking of parents. The following seem to be
four such effects:

1. City wide consideration of "what kind of
a teacher" should my child have.
2. Manifestations of sustained interest in
the problem as evidenced by such statements as
the following:
 - a. "My wife and I spent the whole evening
deciding on these points."
 - b. "There was a big debate at our house last
night."
 - c. "Next time give me a little more time
please."

THE SCHOOL CENSUS.

(Concluded from Page 44)

available candidate can be obtained, hence
someone without an adequate knowledge of the
community and the people is employed, and
the completeness and accuracy of the informa-
tion secured is of questionable value.

The majority of school administrators have
found November first to be the best time for
taking the annual school census. It has been
found that people move least at this season of
the year, hence more exact data can be secured.

There is no unanimity of opinion as to what
should be included in the school census. We
have, however, found the following data very
helpful.

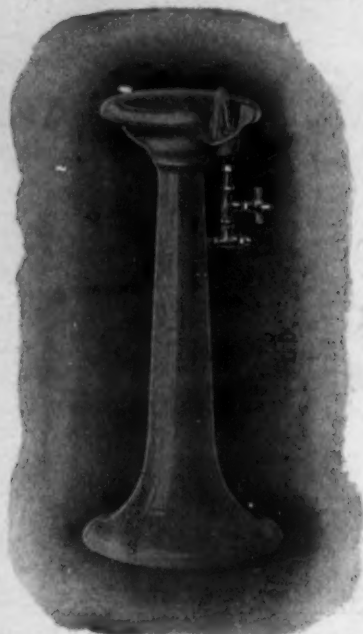
SCHOOL CENSUS CARD.

1. Name			
2. Residence	Street.....	No....	
3. Length of Residence			
4. Nationality.....	Where born.....	Americanized..	
5. Occupation.....	Is Father living.....		
	Is Mother living		
6. Color			
7. Grade reached in school by:			
	a. Father		
	b. Mother		
8. Names of children of school age (6-21 yrs.)			
	(Giving oldest first):		
	Date of birth		
Name	Year-Month-Day	Grade in school	
.....	
.....	
.....	
.....	
9. Names of defective children. (Not able to attend school).			
Name	Blind	Deaf	Insane Cripple (Nature)
.....
.....
.....

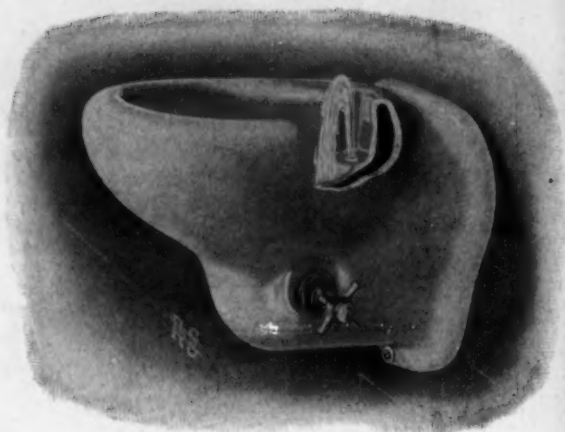


Start A Health Promotion Campaign Via The Bubbler Route

Hundreds use the water bubblers in your school daily. Are they of an approved and sanitary design? Or are they so constructed, and the flow so directed that the pupils in drinking, are obliged to rest the corner of the mouth on the bubbler head? Examine the bubblers in your schools, personally. Drink from them. Then write for a copy of our catalogue, which describes and illustrates in detail our complete line of "Vertico-Slant" Drinking Fountains, the most approved and sanitary drinking fountains on the market.



No. C-143



No. C-92

Rundle-Spence "Vertico-Slant" Drinking Fountains

feature a "protecting jet" which absolutely eliminates all possibility of contamination. They are positively germ proof—correct in design—durable in construction, plus, economical in cost.

Rundle-Spence "Vertico-Slant" Drinking Fountains have no hoods on which the corner of the mouth can rest—no filth collecting crevices that are impossible to clean. The bowls are of extra heavy vitreous china—of free open construction—and are principally and essentially, sanitary in every respect.

Made in a variety of designs to meet every requirement.

Rundle-Spence Mfg. Co.

63-75 Second Street

Milwaukee, Wisconsin

10. Children attending private or parochial schools:

Name	Name of school	Location of school
.....
.....
.....
.....

The best way we have found to keep the school census "up-to-date," is by having the transfer companies, and freight agents report to us every new family moving into or leaving the city. These different agencies have gladly consented to co-operate with us in this work. To make their work as easy as possible we supplied them with a card on which was the following:

Name	Date
Where moved from	St. No.
Where moved to	

We have found even with these precautions families "get away" from us, because people oftentimes move themselves, or have private and out of town transfer companies move them. We endeavor to check-up on these by having two pupils from each block, report families moving into and from their block. In this way we have a double check on families moving into and leaving the city or district.

The school census is important because the district, in many cases receive their apportionment of the states' funds according to the number of people of school age residing in the district. In 1919, St. Louis spent \$6,000 in taking the school census, but received \$56,000 more of the state's funds than it otherwise would have received. Last year Des Moines, Iowa received \$15,000 more of the state's funds by taking the school census. Thus we see from a financial point of view the school census is profitable.

We have found that the following uses may be made of the school census: (1) It can be

made a great help to the truant officers in enforcing the compulsory attendance laws. (2) It indicates the growth and trend of the population, so as to enable school administrators to plan more wisely for the future, in regards to the proper location of new buildings or when to build-on to old buildings. (3) It shows whether part-time or evening classes are needed. (4) It shows whether the school population is increasing or decreasing.

It may also be used in comparing the different items with other school systems of equal

size: (1) Percentage of foreign born children. (2) The age distribution of pupils. (3) The sex distribution of pupils. (4) Percent of pupils retarded. (5) Percent of pupils accelerated. (6) Percent of defective children. (7) The chief industries in the community, and the percent of people engaged in each. (8) The chief nationalities, and percent of each. (9) Percent of pupils attending private or parochial schools.

Let us have as our slogan: "Make the school census an instrument of effective administration and not merely the counting of heads."

Larger Units for School Taxation

Otto F. Aken, Superintendent of Schools, Jackson County, Illinois.

The various arguments advanced to prove the superiority of a larger local unit for taxation, without consolidation for schools, favor the county or township system, as the unit for taxation for school purposes over the present district plan that exists in Illinois, may be classified and arranged under three general propositions.

First, either system is more economical.

Second, more educational advantages for the children.

Third, more conducive to the general improvement of the schools.

Under the first proposition these arguments are submitted:

1. It is less expensive than the district system for the same reasons that a large business is relatively less expensive than a small business.

2. It greatly reduces the number of school officials.

3. It tends to discontinue schools that become too small to be operated efficiently, thus tending to reduce the expense of school maintenance.

4. It prevents the unnecessary duplication of school facilities including the building of schoolhouses.

5. It relieves the county superintendent of a large amount of clerical work and thus economizes energy that may be expended in school supervision.

6. It prevents the wear and tear of petty jealousies, strife and contention between districts, settles forever the school district boundaries.

7. It allows the children to attend the school most convenient.

8. It establishes a uniform rate of taxation throughout and thus facilitates the levying collection of taxes.

9. It economizes effort in the matter of securing accurate school statistics.

10. It lessens the number and cost of elections.

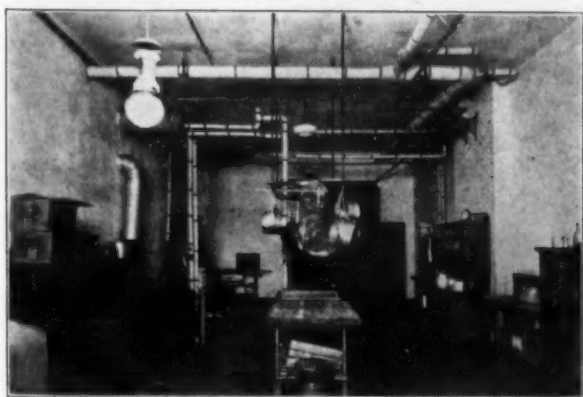
School Administrative Advantages.

Under the proposition of more equal educational advantages for the children the following arguments are submitted:

(Concluded on Page 91)



*An Albert Pick & Company Cafeteria in the Shaw Technical High School, E. Cleveland, Ohio.
Don't your students deserve an eating place like this?*



In this efficient kitchen, wholesome, appetizing foods are prepared for the students of Shaw Technical High School.

The School Cafeteria produces better students—"Pix" Equipment produces a better Cafeteria.

*We have a book for those considering the installation of a School Cafeteria—
Ask for Portfolio Y131.*

ALBERT PICK & COMPANY

208-224 West Randolph Street, Chicago, Illinois

Complete Outfitters of School Lunch Rooms

THE TRUTH ABOUT DRINKING FOUNTAINS



UNSAFE
Vertical Stream Bubbler
Condemned Everywhere

UNSAFE
Camouflaged
Vertical Stream

IMPRACTICAL
Rainbow stream. Hose-like.
difficult to drink from.

No. 1 shows the vertical stream which permits saliva and waste water from the drinker's mouth to fall back to the source of supply. No longer considered sanitary.

No. 2 is a slight modification of vertical stream type. This slight angle is little if any improvement over No. 1.

No. 3 is more sanitary if properly used. However, stream is hose-like with no definite drinking point. Drinker places mouth as near water outlet as possible; result, *unsanitary* like No. 1 and 2.

WRITE
TODAY
FOR
CATALOG!

Puritan
CANTONMENT
DRINKING
FOUNTAINS

See that Puritan
Fountains are
specified for
Your Schools

THE HALSEY W. TAYLOR CO. Warren, Ohio
LARGEST Exclusive Manufacturers of Drinking Equipment

THE PERFECT DRINKING FOUNTAIN STREAM

is produced by the famous PURITAN Cantonment "2-stream projector." This stream producing device was designed for, approved and adopted by the Government during the war. Now recognized as superior by the largest interests and schools in the country.

Practical drinking mound is formed by mechanical means. An interference is set up in the stream which retards the movement of the water at the apex of the arc. This forms a localized drinking mound, while the formation of the stream makes it impractical to drink from any other point.



"Cantonment
2-Stream Projector"

Matchless!



No. 225

Yes! That is what scores of educators say about the Continental Special School Scale—the one scale that makes 100 per cent weighing and measuring efficiency possible. The

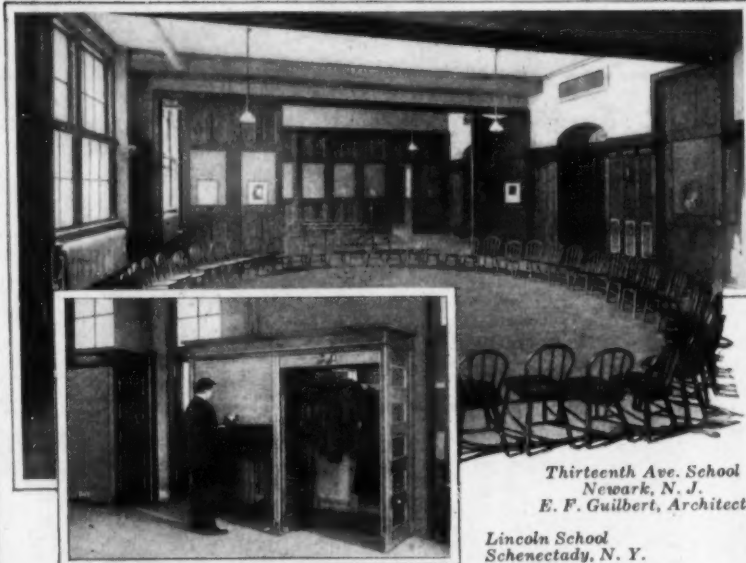
CONTINENTAL Special School Scale

is the last word—and the best word in school scales. Hundreds are in successful use and more being demanded daily.

Your school supply house can supply you. Special literature sent upon request. Address

**CONTINENTAL
SCALE WORKS**

2130 W. 21st Place, Chicago
80 Murray Street, New York



Thirteenth Ave. School
Newark, N. J.
E. F. Guilbert, Architect

Lincoln School
Schenectady, N. Y.

WILSON

Standard for Forty-five Years

Folding and Rolling PARTITIONS

"One Room into Many—Many into One"

For the easy and instant subdivision of large school rooms, Wilson Partitions are standard. Their simplicity, ease of operation, durability, economy and harmonious beauty have been proved in more than 38,000 schools, churches and other public institutions.

Hygienic Wardrobes
Rolling or Disappearing Door Fronts—with or without teachers' closet and blackboard surface. Eliminates cloak room, saves space, sanitary, convenient and under teacher's constant supervision.

All Wilson prices are greatly reduced

Write for Circulars

THE J. G. WILSON CORPORATION

11 EAST 36th STREET, NEW YORK

Offices in Principal Cities

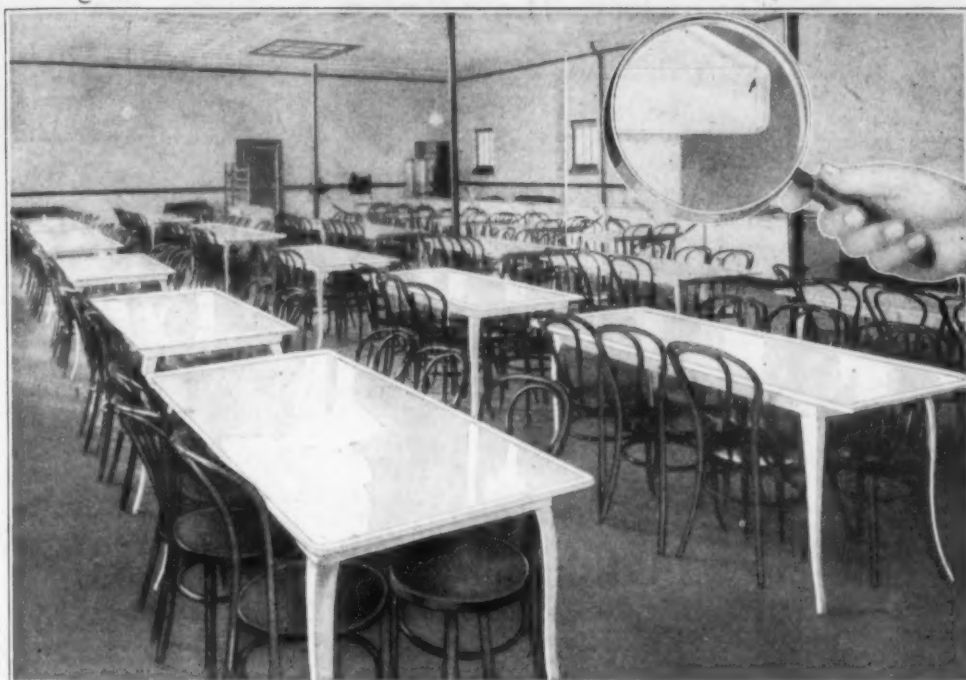
Lunch Room Equipment That Is Durable

What Mr. Keller Says About Sani Equipment -

"A short time ago we placed your cafeteria equipment in our new Junior Building, and I wish to state that we are very much pleased with it. It gives a fine impression, is durable and sanitary. Everyone who has seen the equipment speaks very highly of it and I am sure any school planning on a cafeteria equipment would do well to give your products careful consideration."

PAUL G. W. KELLER, Principal,
Waukegan Township High School, Waukegan, Ill.

Installation in Waukegan Township High School, Waukegan, Ill.



Expressions like this are typical of the satisfaction received from **Sani-Onyx** Top, **Sani-Metal** Base Tables, and other cafeteria equipment. No other type is so widely used among discriminating schools who want the utmost in sanitation and durability.

Sani
ONYX

Sani-Onyx Table Tops are radiantly white, durable, easy to clean and as hard and smooth as polished glass. The "Raised-Rim" (our exclusive patent) prevents chipping and dripping. **Sani-Metal** Table Bases are made of special metal, heavily coated with porcelain enamel. No projections or crevices for dirt and grease to collect.

Write In Today

We will send you our latest catalogue showing all kinds of **Sani** food and drink equipment suitable for schools and colleges. This beautiful book contains valuable information and many illustrations. Send us your floor plan and our engineering department will lay out your space free of charge.

These materials may be purchased from local distributors. Our export department completely equipped to handle foreign business.

Sani Products Co.

Sani Building, North Chicago, Ill.

Canadian Factory

SANI PRODUCTS CO., LTD.

284 St. Helens Avenue

TORONTO, CANADA

(Concluded from Page 88)

1. It would equalize the burden of taxation. It would render it possible to distribute school funds in inverse ratio to the wealth of the township, thus giving the poorer districts the wealth to equip and support a good school. A few districts in a township now reap practically all the advantages of the railroad taxes levied with the township.

2. It would tend to equality of school provisions in respect to schoolhouses, school grounds, apparatus, length of school terms and the ability and character of the teachers.

3. Since the township system tends to the employment of teachers for larger terms, it will restrict in a considerable degree the evils that flow from frequent changes of teachers. I believe you will agree with me on this.

Closely related to these arguments are those which fall under the educational improvements that follow the adoption of the township system. These are:

1. The number of schools being reduced and the number of pupils being increased under township system, there would be better classification, grading and teaching and an increasing interest and enthusiasm on the part of the pupils.

2. The township system is the only means by which we can hope to attain the township supervision which is essential to the highest school efficiency.

3. The township system makes possible a complete system of township schools, including both elementary and advanced.

4. In all probability more interested school officers would be elected. I think you concur in all these points also, therefore:

It is, perhaps unnecessary to speak at length of the grounds upon which these various arguments in favor of either system are based or to

present the facts by which they are supported.

These are a few of the most outstanding possibilities that we would appreciate under the township plan:

If the township was made the Local unit of taxation, without consolidation, by the Legislature we could easily dispense with over 30,000 superfluous school officers, reduce the number of school districts from about 12,000 to 2,000, reduce the number of annual school elections by no less than 10,000. Stop forever the disputes about district boundaries, break down every legal barrier so that any child may attend the school most convenient, establish a uniform rate of school tax for the whole township.

Lessen the aggregate expense of the common schools, make practical an efficient system of township school supervision, afford a means for keeping accurate and uniform school records, improve the character and equipment of schoolhouses, promote uniformity of textbooks, course of study and methods of teaching, enable each township to maintain a good system of graded schools, secure better class of teachers and better salaries for them, as well as a longer term, and finally to impart to the whole system compactness, unity, strength, vigor and efficiency.

Favoring County School Government.

Many arguments that have been submitted favoring a county system for taxation for school purposes are as follows:

1. A county board elected by the people to control the educational affairs of the county, especially that part containing the rural schools.

2. This board would be responsible to the people.

3. It would give a uniform standard of education for the county, thus under the direction of the state and county superintendents, it would be a uniform standard for the state.

4. It would result in a wiser and more economical expenditure of school money.

5. It has been tested in several states and accepted as a much better plan than the district plan in operation in the state. The states cited are California, Oregon, Florida, Georgia, Louisiana, Maryland, North Carolina, South Carolina, and Tennessee.

The chief argument against the county system is that the county is too large a unit, as the district system is too small a unit.

VISUAL EDUCATION IN THE NEWARK SCHOOLS.

Since the organization of the Department of Visual Instruction, two years ago, visual education has made rapid strides in Newark, N. J.

Thirty of the Newark public schools are now equipped with standard professional projection outfits, permanently installed in the auditoriums; ten more schools are served by portable equipment; and five schools have classrooms projectors. Forty schools are equipped with stereoscopes. A total of 25,000 slides and 30,000 stereographs are owned by the schools having the equipment to use them, as noted above. These visual aids give added interest and value to the instruction in science, geography, hygiene, history, and civics. A slide service has been maintained during the past two years by the department of visual instruction from a central depository, to serve schools that wish to borrow them. There are at present about 5,000 slides on this circulating list. Others will be added each year.

Last year 300,000 feet of film were used for purposes of instruction, much of it going the rounds of the city and being shown from fifteen to twenty times, resulting in 2,298 showings to an aggregate audience of approximately one million.



THERE IS NO MORE OCCASION FOR TEACHERS TO DO THE ACTUAL BANK WORK IN TEACHING THRIFT.

THEY TEACH THRIFT LIKE ARITHMETIC—EXPLAIN THE METHOD AND VALUE, BUT DO NOT DO THE CHILDREN'S PROBLEMS.

Automatic Receiving Teller

100% Thrift System

IS DOING THE WORK IN SCHOOLS IN 36 STATES.

IT DOES NOT

REQUIRE THE TEACHER TO HANDLE FUNDS
REQUIRE THE TEACHER TO MAKE REPORTS
DISRUPT SCHOOL ROUTINE OR PROGRAM

BUT

TEACHES THE PUPIL ACTUAL BANKING FORMS
PERMITS THE PUPIL TO DEPOSIT EVERY DAY

A POST CARD BRINGS PARTICULARS

SIZE OF TELLER, 12 $\frac{1}{4}$ x 13 $\frac{1}{2}$ IN.
WITH FRAME, 12 x 26 IN.

General Sales Offices

AMERICAN BANKING MACHINE CORPORATION

404 Wrigley Building
Chicago

Executive Offices
Saginaw, Mich.

New York Offices
Equitable Building

A PRACTICAL EXPERIMENT IN VISUAL INSTRUCTION.

H. O. Dietrick, Formerly Superintendent of Schools, Kane, Pa.

A few years ago a child entered one of our first grades who showed an exceptional knowledge of physical objects. Not only did she seem to be able to interpret the immediate world about her, but her knowledge was general regardless of locality. So one day we said, "Marian, how have you come to understand so many things which you have not yet seen?" She replied, "Oh, yes, but I have seen these things which I am able to tell you about." When questioned further it was found that she had seen these things in a book at her house, as she said. We found that this book had scores of photographs in connection with the description of things. In short, we discovered that the book was one which used the visualization method of instruction.

This incident prompted me to make an experiment with visual instruction. We had then two stereographs and sets of stereographic slides in the Kane school system. About three hundred children were instructed in geography with the text and also by putting the stereograph into daily use. Frequent reviews were given through the slides. At the end of one year's visual instruction, the 300 children were given a standard test in geography. The Boston tests were used. These children made an average score of 66 points. At the same time the same test was administered to about 300 children of like age and temperament, but who had never been instructed by the Visual method. These children made an average score of 34 points. The following year these children were put on visual instruction and their score averaged 67 points. The group using visual instruction excelled the other group by 32 points.

The following year the same experiments were conducted in history and English. One group being instructed by visual instruction, the other using the text only. The test used in history

was Harlan's. Here, again, the average of the visual group excelled the non-visual group by about 27 points. The visual group, by the way, ranked second in the state on the test.

The same kind of an experiment was used in English. The Thorndike Scale for the understanding of sentences and the Starch scale for vocabulary were used. The visual group excelled the non-visual group by 22 points.

This briefly is the result of one experiment with visual instruction. Some one may say, that this just happened. But let us see: First of all we must have a clear appreciation of the relative values of language and pictures in conveying ideas. Pictures, of course, are best suited to represent material objects. All notions of the objective world were gotten through the senses, chiefly sight. If above statement is true, how do you account for the increase in efficiency in English, some one says? I answer that by this statement, viz., judgment, imagination and reasoning are absolutely dependent upon perception. They will work true only as perception has been clear, exact and vivid. The picture of stereograph represents a fact to be perceived. Perception takes place while the child studies, reads about the object represented. The impression becomes fixed. The child feels the picture, therefore, impression forces expression.

Let us not forget that mental energy hangs upon what is actually before the mind. Visualization is strictly a mental act. While the mind should move on in the abstract, yet it is impossible to do so without detecting the truth in some particular concrete illustration of it.

As said before, the results of this experiment were secured through the use of the stereograph and slide. The stereograph, due to the third dimension, or depth, is the most real form of visualization we have. It enables the essential perceptive facts to be grasped quickly. After all, the most essential ideas concerning a material object to be observed are form, size and position.

The lantern slide while lacking the third dimension, or depth, also has the advantage of

remaining in view until the pupils have had time to form and fix definite and dependable impressions.

Again, it can be used right in the classroom while the child is discussing and observing, thus giving the best kind of training in observation and verbal expression. It is here that the motion picture really fails. It is not well adapted for the observation of any perceptive fact other than motion.

This experiment, then, shows how the stereograph and slide conform to the fundamental laws underlying visual instruction, and how they react upon the pupils. The results obtained are the best argument for the introduction into all schools of that type of visual instruction which conforms best to fundamental mental laws and which produces most efficient results.

—New Bedford, Mass. Enlargement of the stages in several of the schools now nearing completion has been recommended to the city council by Vice Chairman Joseph Eggleston of the school board. It is recommended that the stages be raised one foot and that they be extended farther into the seating area.

—Manchester, N. H. Only three of the 45 public and parochial schools have conducted fire drills during a period of ten months, according to a deputy of the fire department who conducted the investigation.

Under the requirements now in existence, drills must be conducted twice each month and returns made to the fire department indicating the number of exits used, the delays and reasons therefore, and the time required for the pupils to leave the building. The average time required to leave a building is between a minute and a half, and two minutes.

—Rochester, N. Y. Plans have been prepared for the erection of one of the largest schools in the world. The building will cover three and three-quarters acres, have 211 rooms and will cost \$4,000,000.

—Baltimore, Md. Steps have been taken by the board to carry out its plan for an election to vote a \$15,000,000 loan to take care of the building program.

STROHBER DIMINUTIVE

THE PIANO FOR THE ADVANCEMENT OF MUSIC IN THE SCHOOL ROOM

ANY TEACHER WHO REALLY
WANTS ONE OF THESE NEW
LITTLE PIANOS FOR HER
SCHOOL ROOM CAN HAVE IT

• WE HAVE A PLAN
WRITE US



WE WANT TO
SEND YOU OUR
DESCRIPTIVE BOOK

You can be supplied by
your local music merchant
—just send us his name,
or write us for the name
of our representative in
your territory.



SMITH BARNES & STROHBER CO

1876 CLYBOURN AVENUE CHICAGO ILLINOIS

I want to know all about your plan to help me get a Strohber Diminutive
for our school.

Name _____

School _____

City _____

State _____

CONCRETE FLOOR BUILDING AT PENNSYLVANIA STATE COLLEGE.

Prof. R. U. Blasingame, Department of Agricultural Engineering, Pennsylvania State College

A concrete floor in the attic of the Horticultural Building at the Pennsylvania State College saved the building from total destruction by fire on October 28, 1921.

This building is 60 by 120 feet and cost \$120,000 in 1914. It houses the departments of Horticulture, landscape design, rural life, and many of the agricultural extension offices. The classrooms accommodate many of the rapidly growing courses in other departments of the agricultural school. In the attic of the building was housed the division of photography and the newly installed research laboratory of agricultural chemistry. It was here that the fire started. It was purely accidental. One of the chemists was heating a flask of ether when the flask broke and the flames from the burning chemical quickly spread to the thin partition walls and other wood material in the laboratory. Had these walls been constructed of fireproof material the fire might have been avoided entirely.

Soon after the fire began it was found that insufficient water supply rendered attempts to extinguish it futile. The illustration shows the anxious crowd in despair over the inability to save the building.

After the inflammable material from which the roof and laboratory equipment were built had burned out the flames grew less until finally the fire went out of its own accord.

The condition of the warped steel rafters indicated very clearly the high degree of heat attained by the fire. On examination the concrete floor does not seem to be damaged in the least.

The total destruction of the building would have hampered the Agricultural School materially, owing to the fact that the other college buildings are already crowded to the limit, making overflow to them impossible. Many valuable records of an apple survey of the State and much experimental data might have been lost if the entire building had burned. Furthermore, the insurance would not have replaced the structure.

There is practically no damage to the three main floors except for smoke and a small amount of discoloring from water. Undoubtedly the concrete floors in this building were worth many times more to the College than the small investment which it took to install them. Without the concrete floors we would now be minus one of our best buildings.

THE SIZE OF CLASSES.

H. C. Daley.

On December 15, 1921, two hundred ten return post cards were sent out by T. J. Knapp, superintendent of schools of Highland Park, Michigan, bearing a request for an expression of opinion regarding the proper average of pupils per teacher in various grades "considering fully the interests of the children, the taxpayers and society at large, counting all pupils actually belonging and all regular and special teachers, excepting principals and supervisors." A statement of ideals not of facts was sought.

Inquiries were addressed to superintendents, high school principals, members of the education department of colleges, county normal training teachers, primary and kindergarten supervisors, widely scattered throughout the country.

One hundred twenty-one replies were received of which seven were blank or contained only information manifestly incorrect or irrelevant.

The average (medians) of the other one hundred fourteen replies were as follows:

GRADE	Median No. of Pupils Per Teacher Considered Desirable
Kindergarten	25
First	30
Second and Third	30
Fourth, Fifth, and Sixth	32.5
Seventh, Eighth, and Ninth	30
Tenth, Eleventh, and Twelfth	25

Fifty five of the replies received were from superintendents of schools. A separate tabulation of the expression of their opinions resulted in no changes from the above except that they would raise the averages in grades two to six inclusive to 35 pupils per teacher.

There were replies from 25 high school principals. Their answers differed from averages given in the foregoing tabulation in grades four to nine inclusive only, where they would have an average of two and one half fewer.

Twenty-four replies were received from principals of elementary and county normal schools, primary and kindergarten supervisors and teachers. They prefer averages of 25 in the kindergarten and first grade and thirty in all grades above.

Ten college and normal educators and research men think 20 a plenty in kindergarten classes, 31 in first grade classes, 35 in grades two to six inclusive, thirty in the junior high school, and 25 in the senior high school.

Going back to the tabulation of the whole 114, the following facts are discoverable:

	Kdg.	1	2 & 3	4-6	7-9	10-12
Lowest	15	20	20	20	20	20
Highest	50	40	40	45	40	36

Between the limits indicated below were found the following per cents of the answers for each grade.

Grade	Av. No. of Pupils Desirable	Per cent of Replies Within Limits Indicated
Kindergarten	20 to 30	78
First	25 to 30	63
Second and Third	25 to 35	85
Fourth to Sixth	30 to 35	71
Seventh to Ninth	25 to 35	90
Tenth to Twelfth	20 to 30	92

Thus it appears that a large majority of school people agree quite closely on the number

of pupils that can with advantage be handled satisfactorily in each of the different school grades. Some day someone with an inquiring mind will discover an opportunity to settle this question by scientific processes.

A SIMPLE FORM OF COMPETITION. By Comparison of Evidence of Ability and Experience Based Upon Record of Work Actually Performed.

Architects have frequently argued that the usual form of competition for the selection of schoolhouse plans should be abandoned in favor of a direct choice of an architect, based on ability and experience as shown in work actually performed. In the following paper, which appeared originally in the American Architect, Mr. Thomas Crane Young puts the general suggestion into concrete form and makes a strong argument for the method. He writes:

The difference between this and the usual form of architectural competition lies in the fact instead of submitting for judgment a set of specially prepared drawings intended to solve a stated problem, the candidates submit photographs, documents, and information as to work already performed. Such data, if reviewed by an expert, would afford at least equally valuable material upon which to base as sound judgment as that obtained in the usual way.

For example: An Owner (one instituting a competition) desiring to choose an architect would first retain the services of a Professional Adviser (as defined in the American Institute Code). He would prepare an invitation and program stating the conditions of the competition, together with a questionnaire to be filled out and signed by the competitor, giving information as to education and experience in conducting building operations, photographs of buildings of which the candidate is author, set of working drawings and specifications used in such a building, or other information useful in effecting a judgment of the qualifications of the candidate satisfactorily to conduct the work contemplated. When all of the information collected in the manner described has been received by the Owner, it would be turned over to the Professional Adviser who would examine and compare same and advise the Owner, in a written report, as to the relative merits of the candidates.

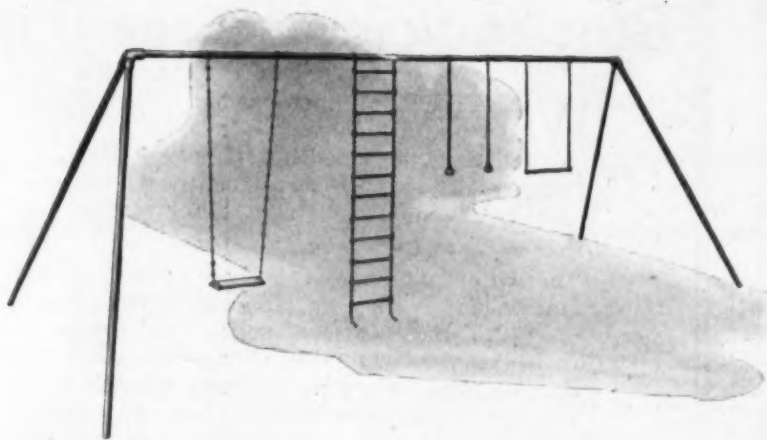
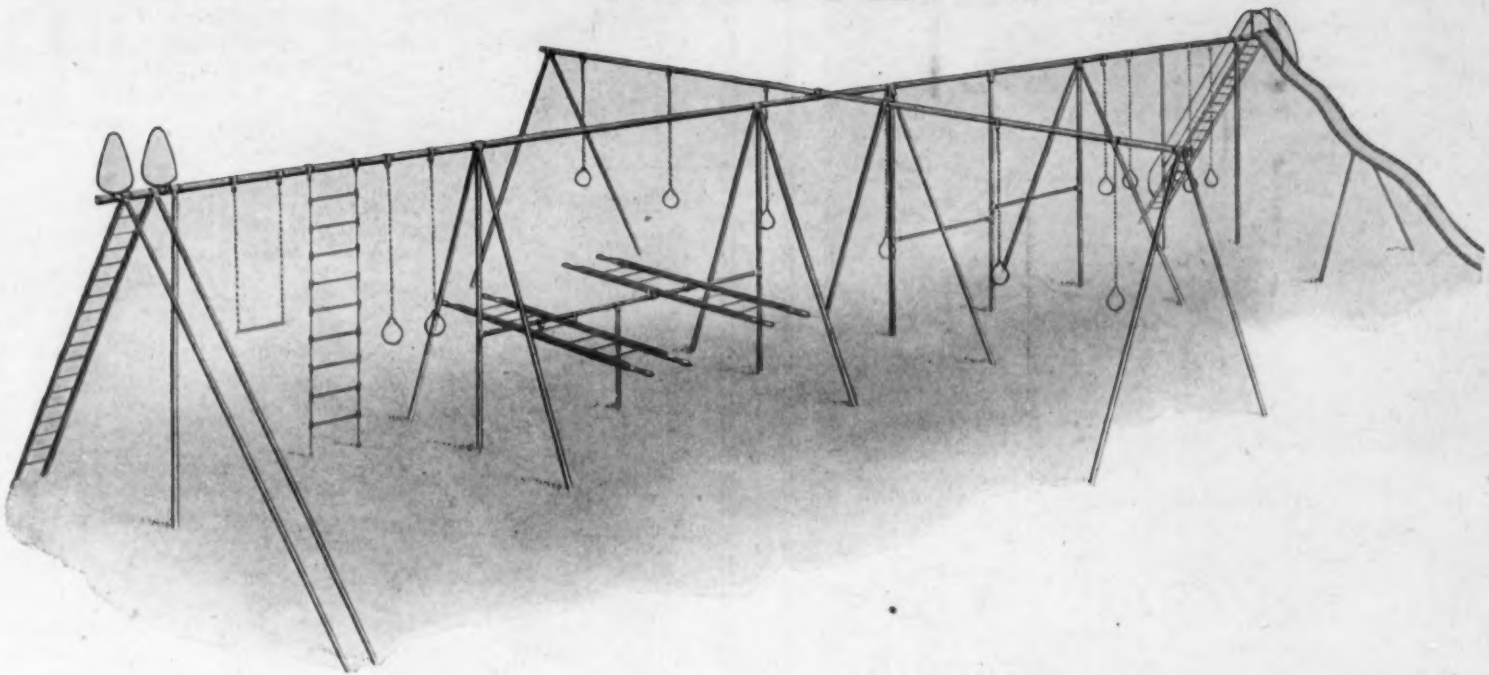
This method of selection seems to have merit where the object of the competition is the choice

(Continued on Page 97)



FEATURING INTENSITY OF FIRE.
Horticultural Building, State College, Pennsylvania, October, 1921.

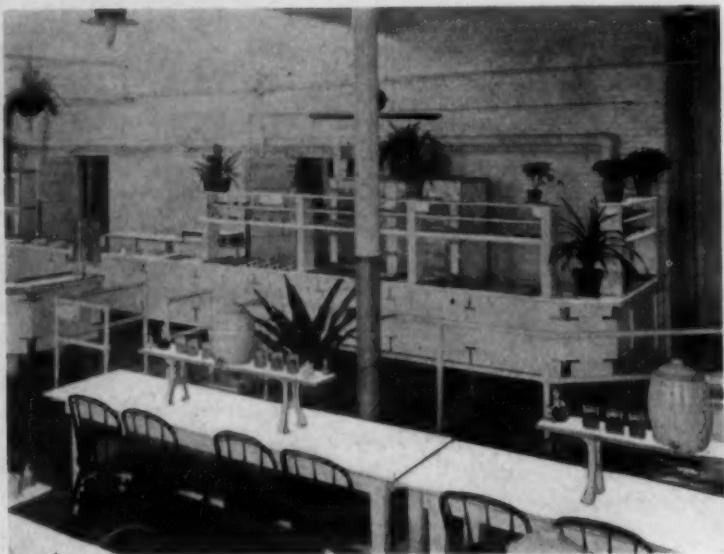
THE **FUN FUL** LINE
PLAYGROUND EQUIPMENT



FUN-FUL Playground Equipment **SUPERIOR**

*This company has devoted 20 years to the manufacture
of children's outdoor goods exclusively. .*

HILL-STANDARD CO. Anderson, Indiana



A typical school cafeteria installation

Building Body Vigor as well as mental strength

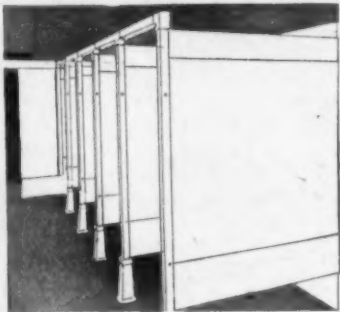
Our foremost educators recognize the fact that an under-nourished body is a handicap to any student. That is why so much attention is being paid to the subject of nutrition. Bodily vigor should be made the foundation of mental development.

The well informed man or woman knows that food gives its greatest benefit when served under conditions which are cleanly and inviting. For this reason Vitrolite has been the choice in many schools for table tops and counters.

Vitrolite is a pure white, non-absorbent, acid proof material that lasts forever. Its glistening surface may be made spotlessly clean by the stroke of a damp cloth. Its use eliminates the necessity of table covers with the incidental expense of laundry and replacement.

The Vitrolite Company Chamber of Commerce Bldg. - Chicago

VITROLITE is the ideal material for toilet partitions and showers. The Vitrolite patented, self-locking, "boltless, screwless" jointing system has contributed a great deal. Note the size of Vitrolite slabs. Slabs for wall use are furnished in sizes from 30 x 84 to 36 x 84.



VITROLITE

Wash and Bathe in Running Water



Buy Showers by the Year

WHETHER it's one or a battery of showers you are buying—measure the cost by the year's service it will give—in water economy—in absence of upkeep costs—in the greater convenience of always being ready to operate.

Take water economy—each hole in the Speakman Anyforce Shower Head is drilled separately—all the healthful, cleansing spray is thrown on the bather—none wasted. And six gallons a minute are plenty, and two minutes enough for a shower.

This Anyforce Head can be instantly regulated to spray gently or to shower with force enough to satisfy the fellow who "likes it on full."

In the battery shower, each shower in addition to the Anyforce Head has lock-shield controlling stops for limiting the volume of water—another economy feature.

The Speakman Mixometer is another factor in determining the shower's yearly cost. It gives the desired shower temperature instantly—no wasted water.

And the yearly cost of repairs—In Speakman Showers, due to care in making, assembling and testing, this is negligible—usually nothing.

All information and data which we have gathered relative to school showers, or in fact, any kind, is at the service of any institution interested in showers.

SPEAKMAN COMPANY
WILMINGTON, DELAWARE

SPEAKMAN SHOWERS

DURAND STEEL LOCKERS—

The door frame and front legs of the Durand Steel Locker are practically one piece of steel. The door is a single sheet of 16-gauge steel flanged inward on four sides.

Owing to the great rigidity and accuracy of this construction, the door fits closely and yet does not bind.

The Durand hinge, which consists of only two parts, is practically proof against breakage or strain. The multiple locking device, bolting at several points, is safe against prying or tampering.

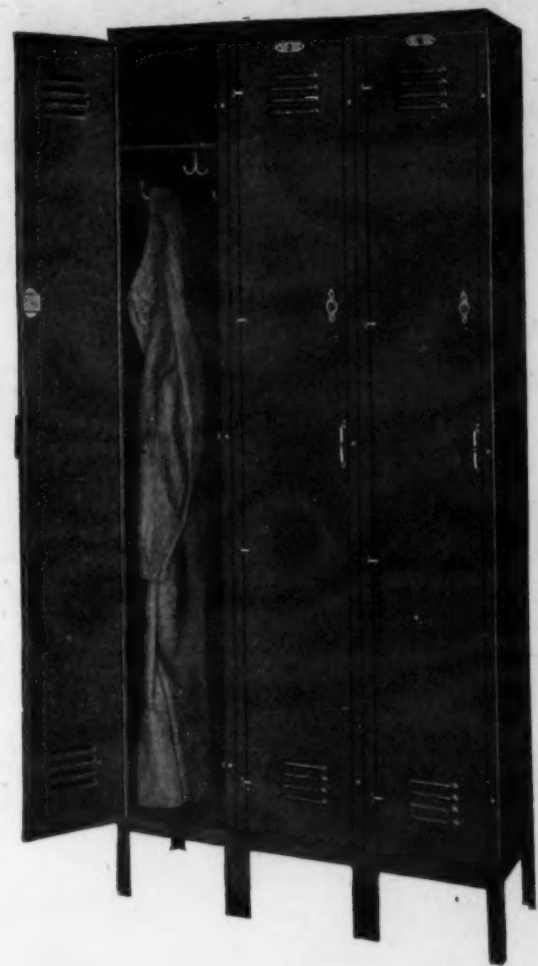
The bottom of the locker is flush with the bottom of the door frame, hence it is easy to keep clean.

Send for catalogs of lockers or shelving. Consult with us regarding specifications, prices, etc.

DURAND STEEL LOCKER COMPANY

1521 Fort Dearborn Bank Bldg.
Chicago, Illinois

1821 Park Row Building
New York City



(Continued from Page 94)

of an individual (or firm) best qualified to carry to a successful conclusion the project under consideration and not the determination of a definite plan.

Such a form would enable the Owner to acquire information upon which to base a choice, covering all phases of an architect's work, and at no expense except for the services of the Professional Adviser. It would enable the Owner to show good and sufficient reason for the choice when made. Dissension over the qualifications of rival candidates would be avoided. The competitors would be assured of consideration, by an expert, of their qualifications, without discrimination, and at a mere nominal expense. Criticism by unsuccessful competitors would be minimized or eliminated.

A competition of the sort described was recently held in St. Louis with satisfactory results. As an example, the questionnaire used in that particular case is given herewith:

Questionnaire.

Evidence of Ability and Experience.

General Character of Evidence. The following evidence, submitted in the form of separate exhibits as described below, will be received by the Building Committee and examined by the Professional Adviser.

The word "you" as used below means either an individual acting as principal or a firm in which the individual is or was a principal.

Exhibit "A."

Professional Training and Experience.

- (a) Statement of your professional school training.
- (b) Statement of your professional experience before entering independent practice. Give the name and location of architects with whom you were employed.

- (c) List of buildings, not exceeding five for which you were mainly responsible while in employ of others; for each give the name of employer and approximate date of construction.

- (d) Were you designer or engineer, or both?

Exhibit "B."

Building Executed. Names of not more than five buildings which you consider your best work and which were executed by you as principal. In each case give the name of the designer and the structural, mechanical and electrical engineers, the name of the owner and of the contracting builder, the location of the building and the approximate date of construction. One of the buildings, at least, should be in or near _____ where it can be inspected.

Exhibit "C."

Photographs of Executed Work. Photographs of not more than five buildings preferably those described in Exhibit "B." These shall be of uniform size, about 8" x 10", and mounted on 10" x 14" card mounts, unframed. (The purpose of these photographs is mainly to show evidence of character and quality of design).

If desired, include a criticism of the buildings illustrated or explanation of the design, including features for which you do not consider yourself responsible, or which you would have changed if given opportunity.

Exhibit "D."

Office Practice

- (a) Is designing done by firm member or employee? Name of chief designer mainly responsible for recent work, giving also name of building.

- (b) Name of designer who would be responsible in largest measure for the design of the

contemplated....in case you were appointed architect.

- (c) Is structural engineering done by firm member? Name of structural engineer responsible for recent work, giving also names of buildings.

- (d) Is mechanical engineering done by firm member? Name of mechanical engineer responsible for recent work, giving also names of buildings.

- (e) Is electrical engineering done by firm member? Name of electrical engineer responsible for recent work, giving also names of buildings.

- (f) Is any of your engineering work done by material dealers or sub-contractors?

Exhibit "E."

Office Organization

- (a) Is your firm organized as to special fields of duty for principals?

- (b) What duties in general are allotted to the different members?

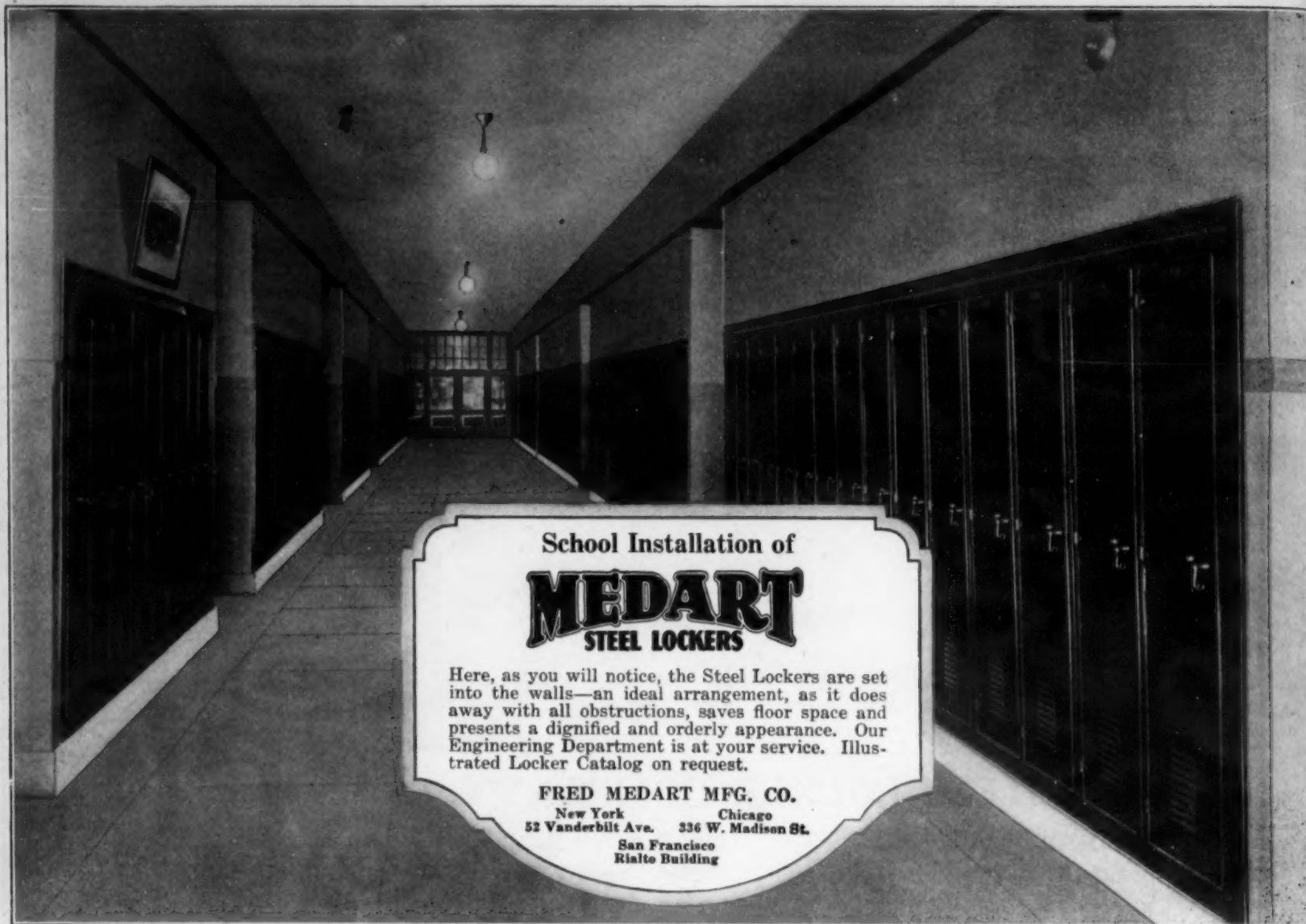
- (c) Is a bookkeeper regularly employed by your firm? Have you an organized accounting system? Was your system installed by a Certified Accountant? Name of Accountant. Are your books regularly audited by a Certified Accountant?

- (d) If employed as architect for the proposed _____, would you be able to execute the work with your present scheme of organization and business system?

- (e) What new departments, if any, would you add to your organization?

Exhibit "F."

Working Drawings and Specifications. Complete set of contract drawings and specifications including general, structural, mechanical and electrical drawings and specifications for one



School Installation of
MEDART
STEEL LOCKERS

Here, as you will notice, the Steel Lockers are set into the walls—an ideal arrangement, as it does away with all obstructions, saves floor space and presents a dignified and orderly appearance. Our Engineering Department is at your service. Illustrated Locker Catalog on request.

FRED MEDART MFG. CO.
 New York Chicago
 52 Vanderbilt Ave. 336 W. Madison St.
 San Francisco
 Rialto Building

building which you consider representative of your best work.

These may be originals or reproductions.

Exhibit "G."

Additional Statement. Any desired statement of experience or ability not covered in the above exhibits.

Form and Delivery of Exhibits. Written exhibits shall be typewritten on plain paper, letter size, and shall be confined strictly to the topic named, which topics shall be arranged in the order in which they appear and shall bear the signature of the individual or firm submitting the same. Each of the above exhibits shall be enclosed in a separate sealed package, each marked (Name of Building) and Exhibit "A," Exhibit "B", etc., as the case may be. These packages shall contain no other exterior marking. The separate exhibits shall then be wrapped or bound together in a single sealed package and addressed to (Name of Chairman of Building Committee) and delivered to (address) on or before theday of, 1922.

(Signed)

(By members of Building Committee.)

.....
 Professional Adviser.

Dated

SEEKING FINANCIAL INDEPENDENCE

(Concluded from Page 64)

tion, are less insistent upon the change than are the school executives and the teachers. Those who are urging the reforms also believe that the board members should be elected by the people at large, thus ensuring a higher type of men and greater independence of action.

It will be interesting to note the outcome of the contest. The contention, no doubt, as in

the case of Indianapolis, will be that the school board must be checked in its expenditures of public moneys.

The experience of the county at large, however, has been that were school boards to feel the full burden of responsibility they become conservative in the matter of expenditures, and usually protect the interests of a tax paying public as well as the schools with absolute fidelity.

SPOKANE'S INTERESTING SCHOOL PROGRESS.

In a study of comparative costs the board of education of Spokane, Washington, has brought out some interesting facts. The population which in 1910 was 104,402, was only increased by 35 in 1920, ten years later. In the meantime the school population increased from 13,737 to 17,104.

In 1911 the valuation of the city was \$92,129,246, and in 1920 it was \$83,343,390, thus presenting the unusual situation of a largely reduced tax source coupled with an increased school population.

In other words, the value of the taxable property decreased 9.54 per cent in ten years, while the school population was increased by 24.51 per cent. The situation was, however, bravely met by increasing the tax levy from 4.5 to 17.5 rate, thus upholding the integrity of the school system.

All applications for excuse for absence with pay must be approved or disapproved, in the case of elementary teacher and principal, by the principal and the district superintendent; in the case of high school or training school teachers, by the principal and the district superintendent assigned to high schools and training schools; in the case of vocational teachers, by the principal and the associate superintendent and in the case of teachers of special branches, by the director or supervisor and the district superintendent. Applications for excuse with pay for absence must be accompanied by a physician's certificate in the form prescribed by the board of superintendents, and in

addition, by a physician's affidavit, if required by the local board or by the board of superintendents. No application will be considered or granted which is made more than six months after the termination of the absence unless the board of superintendents determines otherwise. In case of an absence extending from one calendar year into another, the application for excuse for the period prior to December 31st must be made within six months after the said date, unless the board of superintendents determines otherwise. No excuse for absence with pay may be granted in advance.

Dr. Edson Guest at Luncheon.

Approximately twelve hundred associates and admirers in the New York City Education Department greeted Dr. Andrew W. Edson at a luncheon given in his honor at the Hotel Biltmore, on Wednesday, February 1st. Dr. Edson has been identified with the schools of New York for almost a quarter of a century, and for the past few years his work has been for the most part among the handicapped children of the Bronx. The luncheon was given under the auspices of the teachers and supervisors of Bronx Borough and the teachers of exceptional children.

Among the speakers at the luncheon were Associate Supt. William McAndrew, Dr. Charles E. Jefferson, Mrs. Murray, Dr. John H. Finley and Dr. Henry Hein.

Dr. Edson was presented with a gold watch, bearing the inscription "From his friends in the school system."

—Mr. S. M. N. Marrs, at present first assistant state superintendent of schools of Texas, has become a candidate for the state superintendent's office on the Democratic ticket.

—Superintendent Fred H. Nickerson of Quincy, Mass., has been reelected for another year.

—Mr. Edgar S. Jones, superintendent of schools at Taylorville, Illinois, has resigned to accept the position of general prohibition agent for the state. Mr. Jones was presented with a ring and a traveling bag as parting gifts from the board and the teachers.

Have you a plan?

“Our plan is to paint our buildings every fifteen years. To do this we must paint six buildings a year. And in HOCKADAY we have, we believe, found a paint which will last from the time it is first put on until we can again get around to that building, 15 years.”

Extract from a letter written by an official of one of the largest School Boards in America, (Name on request) to another school official.

Correspondence invited from School Officials and Schoolhouse Architects interested in solving their Wall Painting Problems permanently.

The Hockaday Company

Manufacturers of Wall Finish

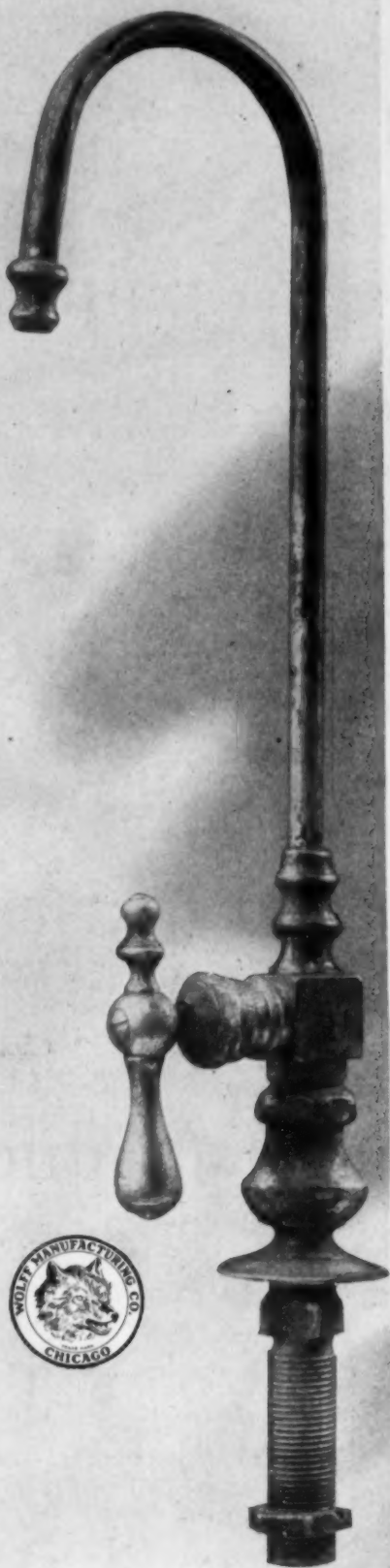
1823-29 Carroll Avenue

Chicago, Illinois

In Service Since 1886

This is one of a pair of Wolff pantry cocks, which were made for Mr. Peter Willems, one of Chicago's old time master plumbers, and installed by him in 1886 at 159 E. Ontario Street. After 35 years of constant and satisfactory service they were removed Sept. 1st, 1921, together with the rest of the Wolff installation, by Mr. Joseph I. Elliott, plumbing contractor. Mr. Elliott has the originals from which this un-retouched photograph was taken.

The enduring purpose of this Company and the thoroughness of its methods may be judged from the fact that such service records as this are the usual thing with WOLFF QUALITY PLUMBING.



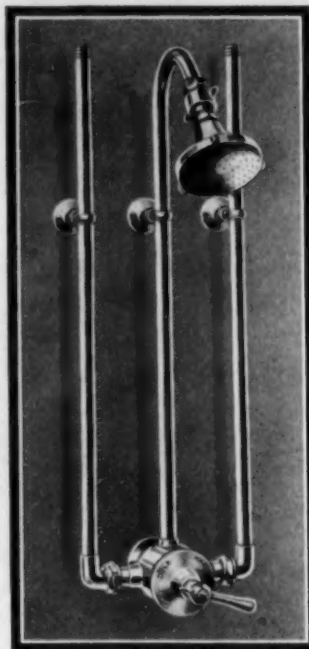
SANITARY ENAMELWARE, RANGE BOILERS,
POTTERYWARE, BRASS GOODS, MARBLE

WOLFF

Wolff Manufacturing Co., Chicago

Established 1855

Chicago Cincinnati Dallas Denver
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Pressure Regulating Stop With
Lock Shield Also Volume Control
Furnished When Ordered.

A SHOWER BATH FOR
ALL REQUIREMENTS

(Write for Bulletin SB15X)

WHY NIEDECKEN SHOWERS

Are giving satisfaction under trying conditions and have been for years in the largest shower installations in the world.

BECAUSE THE INCOMPARABLE NIEDECKEN MIXER

IS THE
SUPPLY CONTROL
AND THE FIRST
COST IS PRACTICALLY THE LAST

HOFFMANN & BILLINGS MFG. CO.
MILWAUKEE, U. S. A.

THE INCOMPARABLE
NIEDECKEN SHOWERS
PATENTED

100 Per Cent The Goal of Achievement

That is the goal set for the student, though rarely attained. It is a recognized fact that maintaining the classroom at the proper temperature and humidity elevates the grade of classroom work.

WILDER

ACCURATE
THERMOMETERS
AND
HYGROMETERS

measure the temperature and humidity accurately. A WILDER Thermometer and Hygrometer in every classroom will prove an effective guide in maintaining proper conditions for mental work—a necessary step toward the 100 per cent mark.

Write for samples, prices, and complete information.

WILDER-PIKE THERMOMETER CO.
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Makers of Thermometers for all purposes

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D. Jon
Flint,
burg,
Mr. C.
Bent,
Arch
Wm. I
kins, C
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J.; Mr
Rose,
Louis,



WHY WEISTEEL

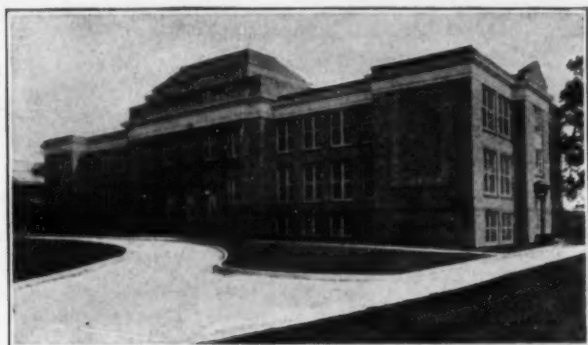
Compartments are the most reasonable for the purpose they serve. Economical—Permanent—Sanitary and of pleasing appearance.

ECONOMICAL

The economy of Weisteel Compartments is based on their permanency. They are made of steel and are practically indestructible and the steel surfaces cannot be defaced. Weisteel Compartments are furnished complete with partitions, doors, hardware, floor and wall fittings, and can be easily installed. The first cost is the only cost.

PERMANENT

Weisteel Compartments are of rigid construction. The steel Partitions are firmly interlocked and welded into the front and back posts. Adjustable castings on top and bottom partition rails allow for variation in walls. The doors are hung on Lawson Universal Hinges and will not sag or buckle.



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PHOENIX, ARIZ.

LESCHER, LIBBEY & MAHONEY
ARCHITECTS

SANITARY

All unnecessary joints have been eliminated and all parts are so shaped that there is no chance for dirt or water to collect. No projecting screws or bolts that are unsightly or that can catch the clothing. The whole construction is easy to clean and keep clean.

PLEASING APPEARANCE

Used for enclosing toilets, showers and dressing rooms in many of the largest city schools. They have stood up under every condition. That is why architects are specifying Weisteel Compartments. Finished in olive green or battleship gray as desired.

Write for booklet giving complete information

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Phoenix, Ariz., Mr. Walter Dubree, P. O. Box No. 145.
Denver, Colo., Geo. W. Summers & Co., 401 Jacobson Bldg.
Baltimore, Md., Jas. Robertson Mfg. Co., 106 Hopkins Place.
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Jacksonville, Fla., Hull & Rivas, Atlantic Natl. Bk.
Minneapolis, Minn., Houston Co., Metropolitan Bank Bldg.

Helena, Mont., Mr. Raymond C. Grant.
Omaha, Neb., Mr. J. T. Kelley, Farham Bldg.
Dallas, Tex., Gilbert Mfg. Co., 1209 1/2 Main St.
Wichita, Kans., Concrete Products, Caldwell Murdock Bldg.
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School Finance Notes

APPOINT ROUND-TABLE COMMITTEES.

The National Association of School Business Officials has recently appointed a number of special committees on round-table discussions in connection with the next annual meeting of the association which will take place May 16-20, at Atlantic City. The members of the several committees will be charged with the duty of bringing out points for discussion in the papers presented at the sessions, and in other ways aiding the work for the best interests of school administration. The committees and the representatives of each are as follows:

School Accounting: Mr. H. H. Brackett, Chicago; Mr. G. S. Snaman, Pittsburgh; Mr. J. S. Mullan, Rochester, N. Y.; Mr. A. B. Moehlan, Detroit, Mich.; Mr. P. H. Sholz, San Antonio, Tex.; Mr. C. P. Mason, St. Louis, Mo.; Mr. H. R. Bonner, Washington, D. C.; Mr. J. S. Mount, Trenton, N. J.; Mr. H. B. Manley, Louisville, Ky.; Mr. Wm. T. Keough, Boston, Mass.

Business Administration: Mr. Wm. Dick, Philadelphia; Mr. G. F. Womrath, Minneapolis, Minn.; Mr. H. N. Morse, Trenton, N. J.; Mr. S. D. Jones, Louisville, Ky.; Miss Ann McPherson, Flint, Mich.; Mr. D. D. Hammelbaugh, Harrisburg, Pa.; Mr. C. H. Meyer, Johnstown, Pa.; Mr. C. J. Church, Cambridge, Mass.; Mr. Horatio Bent, Bloomington, Ill.

Architecture and Building Construction: Mr. Wm. B. Ittner, St. Louis, Mo.; Mr. D. H. Perkins, Chicago; Mr. E. L. Offlighter, Chicago; Mr. Frank Irving Cooper, Boston, Mass.; Mr. J. D. Cassell, Philadelphia, Pa.; Mr. J. J. Kissick, Cleveland, O.; Mr. Ernest Sibley, Palisade, N. J.; Mr. J. R. Bonar, Pittsburgh, Pa.; Mr. H. B. Rose, Providence, R. I.; Mr. R. M. Milligan, St. Louis, Mo.

Building Operation and Maintenance: Mr. G. F. Womrath, Minneapolis, Minn.; Mr. Schwebel, Cicero, Ill.; Mr. J. H. Brady, Kansas City, Mo.; Mr. H. G. Miller, Bucyrus, O.; Mr. James J. Ball, Denver, Colo.; Mr. H. N. Morrill, Grand Rapids, Mich.; Mr. F. F. Buchard, Grand Forks, N. D.; Mr. J. D. McCollister, Davenport, Ia.; Mr. J. M. Gore, New Orleans, La.; Mr. J. A. Page, Roanoke, Va.

Equipment and Supplies: Mr. E. M. Brown, St. Louis, Mo.; Mr. C. M. McKee, Pittsburgh, Pa.; Mr. H. E. Boppel, Cleveland, O.; Mr. R. S. Scobell, Erie, Pa.; Mr. C. M. Woodruff, Akron, O.; Mr. J. M. Gore, New Orleans, La.; Miss Rita Knowles, Moline, Ill.; Mr. H. W. Anderson, Kalamazoo, Mich.; Mr. J. G. Stearley, Oklahoma City, Okla.; Mr. A. L. Castle, Chester, Pa.

OLYMPIA BUILDING PROGRAM.

A new building program has been placed in operation at Olympia, Washington, following a campaign launched in February, 1921. The program calls for four important procedures, namely, the purchase, clearing and grading of ten and one-half acres of land for a playfield and athletic field, and for a grade school site, the erection of a grade school to replace an old building, the building of an addition to a grade school, and the purchase of a half block of land to be used for a playground and building site for a new building. The bond issues for these purposes, with the exception of the last mentioned building, have been approved by the people at a special election.

As an indication of the progress of the new program it should be noted that the new athletic field and playground was dedicated in memory of Isaac I. Stevens on October 8, 1921. The construction of the first one of the grade schools began in January, 1922, and the building will be ready for occupancy in September, 1922. The new building will have two stories and a full basement and will contain twelve classrooms in addition to auditorium, home economics room, cafeteria, manual training shop, library, kindergarten and boys' and girls' gymnasiums.

The planning and supervision of the construction work is being done by the firm of Wohleb and Stanley, Architects.

BUILDING AND FINANCE.

—Joliet, Ill. The new annex to the Joliet High School will be completed September 1, 1922, at an estimated cost of \$800,000.

—A new grade school to cost \$250,000 will be erected at Joliet, Ill., this spring.

—The schools of Will County, Illinois, will receive approximately \$27,000 as a result of liquor fines collected for violations of the prohibition law.

—Orland, Ill. The school board will ask for a bond issue of \$25,000 for the erection of a high school.

—The cost of educating one pupil in the Joliet, Illinois, schools for one year, has been fixed at \$86, based on an average of 6,500 pupils during a school year.

—Lenoir, N. C. Plans have been completed and the construction work started on a new 24-room school which is to be completed ready for occupancy in September, 1922. The building is in the Collegiate-English style of the Elizabethan period, with walls of tapestry brick and Indiana limestone trimmings. The building has a large auditorium and a gymnasium which may be used in combination. The structure was designed by Architects Benton & Benton of Wilson, N. C.

—Ground has been broken for the construction of the Lincoln junior high school, at Minneapolis, Minn.

—Minneapolis, Minn. The board of education has asked the city council for a bond issue of \$2,500,000 to be used in the erection and equipment of new schools, and the acquisition of school sites, in accordance with the proposed building program.

—Deshler, O. The school board is about to enter upon a new building program. A bond issue of \$120,000 has been sold and a contract for the construction of a grade and high school will be let in the early spring.

—New York, N. Y. The attention of teachers has been called to the law providing that women teachers who marry aliens shall forfeit their citizenship and lose their teaching positions.

—Owing to a deficit of \$150,000 the Oakland Calif. School Board finds itself compelled to re-budget its entire school construction program.

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—The per capita cost of education in Pittsburgh, Pa., has risen in eight years from \$66 to \$99. A statement of school board finances shows estimated expenses for 1922 of \$13,374,200, which means that a deficit of \$3,000,000 must be met by a bond issue.

—Ann Arbor, Michigan, is erecting four new grade schools, at an approximate cost of \$1,100,000. Four architects and a firm of mechanical engineers have been employed to carry out the work, which is part of a building program adopted a year and a half ago.

—Belden, N. Mex. A bond issue of \$45,000 has been carried by the voters. Contracts have been left for the erection of an eight-room addition and for the erection of three one-room schools.

—Port Chester, N. Y. The city has voted \$402,000 for the enlargement of the school plant. Among the structures to be erected are a new elementary school to cost \$190,000, an addition to the junior high school to cost \$120,000, and an addition to the George Washington School to cost \$70,000. The enrollment of the schools has increased from 1,000 to 4,500 students.

—Goshen, Ind. The board of education has recently purchased a seventeen-acre tract of land upon which it plans to erect a high school. The plans provide for an auditorium to seat one thousand persons. Messrs. Ellwood and Miller, of Elkhart, are the architects.

—Manhasset, N. Y. The board of education has completed plans for a new unit to be added to the present central building, at a cost of \$200,000. The structure will house the senior high school, the junior high school and will contain a gymnasium of standard size. Mr. Frank Briggs, Plandome, N. Y., is the architect. In addition to the building, a memorial park will be opened for public use during the coming summer. The park is located adjacent to the school and serves as an athletic field for school activities.

—Solvay, N. Y. A building campaign for a junior-senior high school has recently been undertaken by Supt. J. P. Sherrard. The plans call for a bond issue of \$486,000.

—With the fall opening of the schools of Beloit, Wis., two new junior-senior high schools were occupied. The new schools accommodate the pupils of the seventh and eighth grades of two

buildings. The buildings have required the employment of thirty teachers but relieve all the grade buildings as well as the senior high school. The few unused rooms in the several buildings will be used for special schools or classes as the demand arises.

—Rochester, Minn. During the school year 1920-21 a nine-room building costing \$123,000 was occupied. The Lincoln School, an eight-room building, was doubled in size at a cost of \$60,000. This gives a total of six new ward schools and a high school.

—Canton, S. D. The city has recently voted \$165,000 for a junior-senior high school building. A ten-acre site has been obtained for the building and for a fine athletic field.

—On January 3rd, the citizens of Montgomery County, Alabama, excluding the city of Montgomery and the Pike Road School, voted to levy a three-mill tax for schools for a five-year period ending September, 1926. The tax adds approximately \$40,000 a year to the school funds of the district in which it is levied. In view of the financial depression, the action of the people of Montgomery County is significant.

Including two large consolidated schools already completed, five consolidated schools in process of erection, and five further building projects to be completed in September, the County will have invested in school property for the education of rural and suburban children the sum of \$750,000. Of this amount, \$550,000 has been provided since the first of July, 1920.

—New York, N. Y. The board has adopted a resolution naming Public School 39, Boys, Manhattan, the Woodrow Wilson School.

—Niles, O. With the opening of the school year, students on the north side of the city occupied the new Roosevelt School, erected at a cost of \$175,000. In addition, a new annex has been completed for the Garfield School. The new vocational school which is probably of special significance, has been erected on the campus of the McKinley High School. The excavated portion contains the junior manual training room, a room for cabinet making and a small finishing room. Another room has been arranged to be used later as a cafeteria, with an adjoining kitchen.

It is planned to turn the old Central School into an "opportunity" school for children who for various reasons are retarded. In this school the children will be given more practical handwork and less bookwork thus preparing them for more directly entering a lifework or calling.

—Devils Lake, N. D. Following an unfavorable opinion given by the attorney general, the school board finds that it will not be possible to erect a high school building as a result of the vote for bonds taken last June. An amendment to the constitution adopted in 1920 provided that a school district by a majority vote might increase such indebtedness five per cent on the assessed value, beyond the five percentum limit. A number of districts acting on the belief that they had authority to increase the indebtedness took action since the amendment was adopted. It now appears that further legislation is necessary to give districts this power and it will be necessary to await the action of the state legislature before the districts may legally vote for bonds beyond the old limit of five per cent.

—Eau Claire, Wis. The board of education has asked the parent-teachers' association to elect the members of a committee which shall serve as a committee on sites for a new high school building. Each section of the city will be represented on the committee which is to recommend possible sites and finally to recommend to the board, two or more suitable sites. It is believed that such a committee will have its findings free from the charge of sectional, personal or financial bias.

—Cisco, Texas. The construction of a new high school building will begin in the near future. The building will be of fireproof construction, will accommodate 500 students and will cost about \$200,000 with equipment. During the past eighteen months the city has completed three ward schools.

—The school board of Lincoln, Neb., has accepted the Kohn invention, a new concrete reinforced non-support floor form for a group of buildings to cost \$2,000,000. The invention has been tested by engineers and found satisfactory for building uses.

—Astoria, Ore. An addition will be erected to the high school at a cost of \$75,000. The addition

(Concluded on Page 105)

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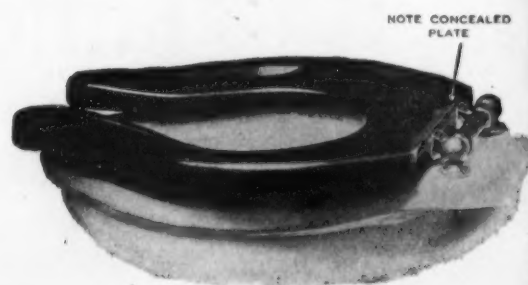
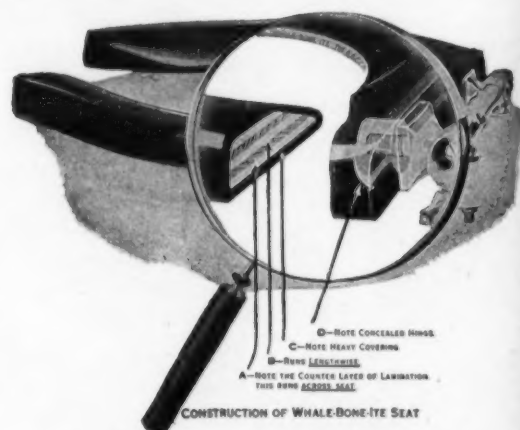
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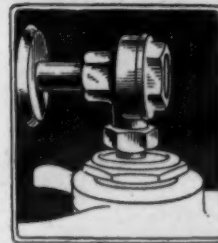
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(Concluded from Page 102)

tion will house the departments of physical education, manual training, automobile mechanics, household arts and cafeteria. The building has been named "Patriot Hall" and is dedicated to the soldiers of the world war.

—The United States Bureau of the Census has recently issued figures showing the expenditures for educational purposes other than libraries in cities of 100,000 to 150,000 population. In Bridgeport, the total payments for teachers' salaries and other expenses of the maintenance and operation of schools for year ending March, 1921, amounted to \$1,510,757, which represented \$10.20 per capita of population, and comprises 32.2 per cent of the total expenses of all general departments of the city.

—The several school districts of the state of Pennsylvania have due for the school year of 1920-21 approximately \$5,000,000 which was due in August, 1921. The responsibility for the payment of the funds rests with the fiscal officers of the state comprising the auditor general and the state treasurer.

The act appropriating state funds specifically provides that the funds appropriated are for the support of the schools, for the two fiscal years beginning on the first Monday in July, 1919.

—Fort Wayne, Ind. A new Franklin School was occupied with the opening of the second semester.

—The school board of Leavenworth, Kans., has employed Mr. Charles A. Smith of Kansas City, Mo., as architect for the new buildings to be erected under a \$500,000 building program. A commission of five per cent of the contract price is to be paid the architect, three per cent to be paid when the contracts are awarded.

—Four new Boston intermediate schools will be named after Theodore Roosevelt, Daniel Webster, Henry Higginson and Frank V. Thompson.

—The school board of St. Louis, Mo., plans the erection of school buildings to cost \$3,700,000. Plans have been prepared for the erection of two high schools and one elementary school.

—Following a conference of the school board with the building inspector's office at Baltimore, Md., it has been ordered that minor repairs to schools shall be made by employees of the board under the supervision of the inspector of buildings. Larger jobs of repair will be given out

by contract through the board of awards. The change is taken to mean a step in the direction of school board control over repairs to school buildings.

—The 1922 school building program of the Chicago board of education calls for an expenditure of \$15,000,000. The new buildings comprise a new high school and additions to three further high schools, besides a number of elementary structure.

—Duluth, Minn. A school building survey has been conducted under the supervision of Supt. J. H. Bentley. The school buildings of the city have been scored by Dr. Neal of the University of Minnesota and his five assistants. The need of a reorganization of the buildings or additional buildings is shown in the report of the superintendent by the increase in attendance, particularly in the senior high schools, which show a very unusual growth. The senior high school enrollment for 1921 shows an increase of 37 per cent over 1918 and a 27 per cent increase over 1920.

—Mr. C. L. Johnson has been employed by the city of Asheville, N. C., to act as superintendent of construction of the four new schools to be erected from the proceeds of the \$500,000 bond issue. Mr. Johnson will devote his entire time to the work of supervision and to the other matters pertaining to the erection and alteration of the buildings.

—Detroit, Mich. The board of education has announced that it will stand back of its \$22,000,000 budget appropriation for the next year despite criticisms which have been directed against the expenditure. The board members feel that they are justified for an aggressive attitude in a determined effort to improve the condition of the school plant.

Since July, 1917, it is pointed out, the board has spent nine million dollars on additions and ten million on new units. At present there are under construction schools which will accommodate 7,440 pupils. The \$8,000,000 already available will be used for 11,400 more, and with the three primary schools, and one intermediate school in each district, there will be room for all children for a year in advance.

—Director Frank W. Wright of the Elementary and Secondary Schools of Massachusetts, has de-

clared that the state needs 200 new schoolhouses and that they should cost about \$27,000,000.

—Rutherford, N. J. A new high school will be occupied in September, 1922. The building will cost \$325,000.

—Kenosha, Wis. A citizens' committee of fifteen, comprising men and women of large affairs, has been appointed to make a special study of building needs, and to report on a building program to cover a period of ten years.

—Green Bay, Wis. Construction work will start this summer on a new East High School. The building will be erected on a 23-acre tract of ground, facing the city park, and will provide accommodations for vocational work, gymnasium, domestic science and an auditorium in separate units. A large athletic field will adjoin the gymnasiums and separate playgrounds will be provided for boys and girls.

The plans contemplate the remodeling of the present junior high school, the erection of another, and the erection of new buildings to replace several dilapidated grade schools.

—Xenia, O. Two fine high schools, one for white students and one for colored students, are under construction. The two buildings will cost \$550,000. The colored school is expected to be ready for occupancy in September, while the larger building for white students will be ready in January, 1923. Mr. Albert Pretzinger, of Dayton, is the architect.

—Traverse City, Mich. Bids will be received for the construction of the new senior high school building. The building will have a gymnasium and an auditorium seating 1,200 persons.

—Onondaga Valley, N. Y. A contract has been let for the construction of a school to cost \$200,000. The site is a gift to the school.

—Ardmore, Okla. A Junior High School has been opened with an enrollment of 700 students. The building cost \$350,000.

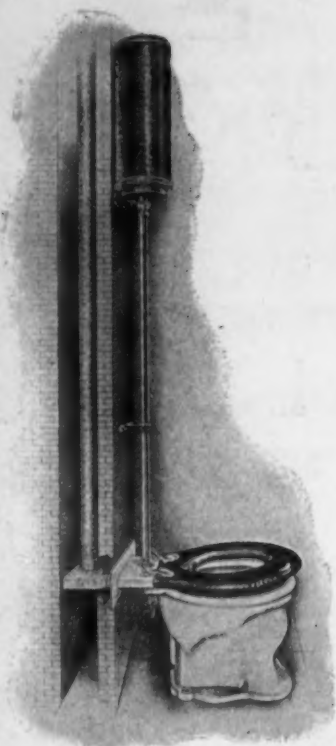
—Blytheville, Ark. Student classification through mental tests has been effective in reducing elimination and retardation in the schools.

—The school board at Milwaukee has, owing to the crowded condition of the schools, closed its doors to all non-resident pupils. The income for the year on non-resident tuition fees was over \$50,000, but the cost of housing and instruction was over \$90,000.

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Schools Belong to the State.

"The schools do not belong to the city and should not be considered among its municipal expenditures," said Frank P. Graves, State Commissioner of Education of New York. "If they are to be classified in the general city budget they will inevitably get the small end of it."

"It is an educationally sound principle that school authorities should have the specific right to determine, within reasonable limits the amount of funds they need, and to certify the same for levy without interference, if we are to be true to the principles for which America stands. The people of the state as a whole are supreme, since the whole state is interested in the education of its children, and it cannot leave so important a matter to the whims of any community."

"Schools are in a different category from all other community interests, for they alone deal with the future, rather than merely with the present, and they constitute the agency par excellence that seeks for an uplift of existing conditions. Damage or neglect of other city departments may be later atoned for, but injury inflicted upon education irreparably weakens moral fibre and debases intellectual life throughout an entire generation."

BUSY SUPERINTENDENTS

Supt. John R. Fausey of Winchester, Mass., in his recent annual report to the board, comments quite extensively on the survey report of the United States Bureau of Education made in 1920. The board has already carried out a number of improvements as a result of the survey and the present report is a forward-looking document to show what has been done and what is being done.

In order to set forth in a definite way, desirable standards for high school teachers with re-

gard to professional training, the following statement has been drawn up:

1. Thirty hours of professional study devoted to the general problem of high school teaching.
2. Sixty hours of professional study devoted to the technique of teaching in the subject taught.
3. Acquaintance with the theory and practice of educational measurement, involving a knowledge of the most commonly used terms, such as median, mode, average, quartile, mean deviation, average deviation, spread.
4. A working acquaintance with the theory of normal distribution and its application to school marks.
5. Acquaintance with the principal standard scales and tests now in use in the subject taught and some general knowledge of intelligence scales.
6. A practical and usable acquaintance with the project-problem method of teaching.
7. Membership in at least one of the professional organizations devoted to the subject taught.
8. The reading of at least one professional journal devoted to teaching the subject taught.

Because supervision for the first six grades was strongly recommended by the survey, such an office was created at the beginning of the present school year. The supervisor has charge of the teaching done by thirty elementary teachers located in buildings which do not have a supervising principal.

The following aims have been formulated to serve as an ideal for her work:

1. To formulate teaching upon the child's actual experiences and then to broaden these experiences realizing that experience is education.
2. To give the child opportunity to express himself spontaneously in music, drawing and dramatization as well as in oral and written English.
3. To give the child opportunity to help initiate and decide on schoolroom practice in order that he may develop more self reliance, responsibility and self control.
4. To motivate the work in such a way that children may have problems which require them to think, to judge and to organize.

5. To provide so far as possible for individual differences.

6. To work for a greater appreciation of good literature.

7. To unify the work of the various grades.

8. To make sure above all that the child finds joy and satisfaction in his work.

The election of county school superintendents of Kentucky by vote of the people is provided for in a bill to be introduced in the legislature by Representative O. A. Denton.

Under the bill, a person to be eligible for the office must be 21 years of age, hold a state diploma or certificate, unless a graduate of a high school, or possess a first-class certificate, or must have taught in a public or high school for at least six years.

The bill gives the superintendent the right to appoint two examiners, who must possess the same qualifications as the county superintendents, the two examiners and the superintendent to compose the county board.

—Chicago, Ill. Supervision over physical education of children in the public schools has recently been placed in the hands of Supt. P. A. Mortenson. Control of the municipal playgrounds was previously given to the board by the city.

—School superintendents of medium-size cities average 43 years of age and receive an average salary of \$3,400, according to Dean C. E. Chadsey of the School of Education, University of Illinois, speaking before a conference of Illinois superintendents at Carbondale. Dr. Chadsey declared a hopeful indication was the gradual transfer of authority and power from the board to the superintendent of schools.

—Big Springs, Tex. The school board has awarded a bonus on one month's extra salary to full-year teachers eligible for reelection at the close of the year.

Supt. S. E. Weber of Scranton, Pa., has accepted a place on the faculty for the 1922 summer session of the University of Pennsylvania. Prof. Weber will have charge of the courses on "Problems of the City School Superintendents" and on "Problems of the School Principal."

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without injury. Finger prints, ink stains, are readily removed with soap and water.

—The velvety flat wall coating which increases the light in the classroom without glare. It can be washed easily with soap and water, without injury. Finger prints, ink stains, are readily removed with soap and water.

LAPIDOLITH
TRADE MARK

ground up by children's feet in halls, gymnasiums, etc. A Lapidolized floor is dense and non-absorbent, and so can be easily washed and made odorless and sanitary. For these reasons, tens of millions of square feet of concrete floors in schools and universities, everywhere, have been Lapidolized. Write us for the nearest reference.

—The original liquid chemical hardener and dust-proofer for old or new concrete floors. It will positively prevent concrete dust from being

LIGNOPHOL
FOR WOODEN FLOORS

sanitary and decorative finish. Displaces ineffective floor oils.

—The modern wood hardener, gives new life to old and new wooden floors, by replacing the natural oils and gums. Prevents dusting, wear and splintering, and shows a smooth,

*Write for circulars and testimonials from schools,
covering any or all Sonneborn Conservation Products.*

L. SONNEBORN SONS, Inc.

264 Pearl Street

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New York

(SONNEBORN)

OZONE PURE AIRIFIER



The power consumed by the apparatus is extremely small, being only about 120 watts maximum for a 25,000 cu. ft. (per minute) machine when operating on alternating current. Based on an energy cost of 10c per kw. hr., this would give a cost of 12c per 10-hour day.

The installation of the "Ozone Pure Airifier" in connection with Fan systems of heating and ventilation in schools, permits of re-circulation of a large percentage of the total air volume handled.

ADVANTAGES

Saving in Cost of Operation

- 1.—Reduction of 25 to 50% in coal consumption.
- 2.—Reduction in Steam Consumption.

Saving in Initial Cost of Mechanical Equipment

- 1.—Tempering coils may be omitted.
- 2.—Boiler capacity may be reduced.
- 3.—Size of steam and return pipes, valves, fittings and pumps may be reduced.

RESULTS

Pure air in rooms, free from organic odors and impurities.

We have much literature on the questions of ventilating and heating which we shall be glad to send to anyone on request.

Ozone Pure Airifier Company

1401 W. Jackson Blvd., Chicago, Ill.



School House Ventilation

requires the careful and painstaking investigation by the board members who are responsible for its installation and satisfactory operation.

SHERMAN SCHOOL, STREATOR, ILL. is an example of a modern, scientifically designed efficient and economically operating ventilating installation. This school is equipped throughout with

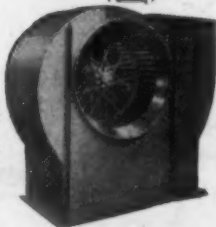
Bayley PLEXIFORM FANS

selected for their ease of operation, space economy, durability and design. Plexiform fans are light in weight, being built up on carefully machined, perfectly balanced hubs with bicycle type spokes, and a housing designed for the space it occupies. Write for list of Bayley equipped schools and investigate them before ordering your ventilating equipment.

BAYLEY MFG. CO.

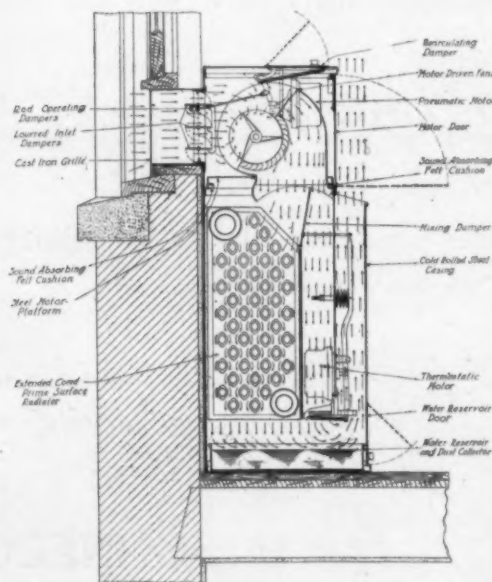
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Milwaukee, Wis.



Cross Section Through Peerless Unit

Showing mixing damper in intermediate position under thermostatic control.



A perfect mixing damper is necessary to properly control room temperature.

Overheating of rooms in mild weather is a common fault with most unit systems due to improperly designed mixing dampers. The Peerless Mixing Damper will keep your rooms just as comfortable in mild as in severe weather, because it can be so adjusted as to bypass ALL or any portion of the air around the radiator. It can be arranged for either hand or thermostatic control.

The Mixing Damper Without a Peer

PEERLESS UNIT VENTILATION CO., Inc.

437-9 West 16th Street,

New York City.

THE AMERICAN SYSTEM

OF

BETTER HEATING AND VENTILATING AT
LOWER COST

SOLAR HEAT GENERATORS

USED SEPARATELY OR IN BATTERY

GIVING UNIT FLEXIBILITY AND HIGH
EFFICIENCY AT LOW FUEL COST.RECORDS SHOW UNUSUAL DURA-
BILITY.

COMBINATION BOILERS

USED SEPARATELY OR WITH

SOLAR HEATERS, COMBINING

IN ONE APPARATUS STEAM

FOR HEATING AND AIR FOR
VENTILATION.

ASBESTOSTEEL CASINGS

USED IN PLACE OF

BRICK CASING WITH

RESULTING

INCREASED

EFFICIENCY

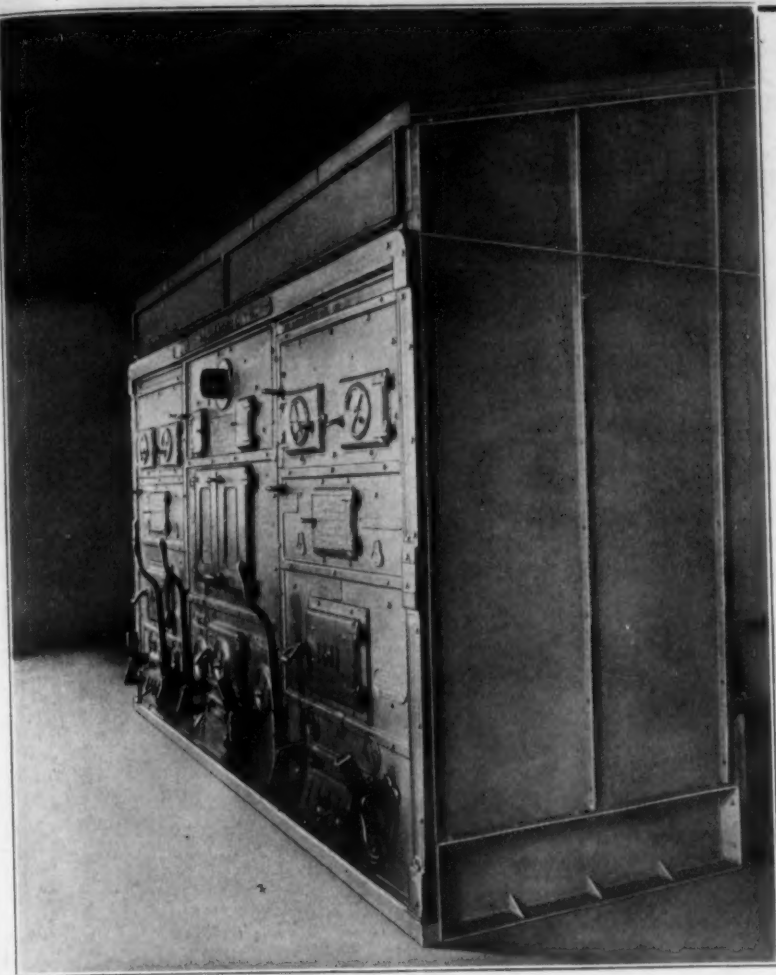
HUMIDIFIER

FURNISHED WITH APPARATUS

WRITE FOR DETAILS AND NEAREST BRANCH OFFICE

AMERICAN FOUNDRY & FURNACE COMPANY

BLOOMINGTON, ILL.

A TYPICAL FAN BLAST INSTALLATION USED IN
SCHOOLS, CHURCHES, THEATERS AND FACTORIES

Personal News of Superintendents

—Supt. John A. Webb of Tucumcari, New Mexico, has been unanimously reelected for a second two-year term. Supt. Webb has conducted the most successful school the city has ever had and the patrons were pleased to have him retained for another two years.

—Supt. Charles E. McClure of Belen, N. Mex., is serving his second year as head of the school system. Mr. McClure's salary has been raised from \$2,000 to \$3,000.

—Mr. Lyman C. Hunt, principal of the Spaulding high school, Barre, Vt., has accepted the superintendency at Burlington, at a salary of \$3,500.

—Dorothy Canfield Fisher of Arlington, Vt., has been reappointed a member of the State Board of Education for a five-year term. The appointment took effect February first.

—Supt. F. E. Converse of Beloit, Wis., this year completes 25 years of service as head of the school system. In that time, the number of schools has increased from four to twelve, while the number of teachers has increased from 40 to 165, in addition to a school physician, nurse, attendance officer, and clerks for each of the three high schools. Each grade building has a kindergarten, a dental clinic, and scales for weighing pupils. Milk is served at cost each day to pupils and undernourished children unable to buy the milk are furnished with it from a fund provided for the purpose.

—Asst. Supt. Wm. F. Webster of Minneapolis, Minn., has been relieved of some of his supervisory duties, taking over some of the research work and assisting in the direction of the high school finances.

—Mr. J. W. Ramsey of Paragould, Ark., has been elected superintendent of schools at Helena, succeeding E. B. Tucker resigned. Mr. Ramsey

is a native Arkansan, has the A. B. degree from Ouachita College and the M. A. degree from George Peabody College for Teachers.

—Mr. J. P. Sherrard has accepted the superintendency at Solvay, N. Y.

—Mr. Clinton H. Atwood, formerly supervising principal of the Lowville schools at Lowville, N. Y., has accepted the principalship of the Boyd School, at Solvay.

—Mr. Vinal H. Tibbetts, who was elected to the superintendency at Manhasset, N. Y., last June, has been reelected for the ensuing year at a salary of \$3,600.

—Mr. M. C. Helm, who went to Peru a year ago as one of three regional directors of education for the Peruvian government, has resigned and is now superintendent of schools at Fairport Harbor, a position which he formerly held. Col.

John K. Breedin, formerly president of Anderson University, has been promoted from Deputy Director to succeed Mr. Helm in Peru.

—Mrs. Grace Strachan Forsythe has been elected an associate superintendent for the schools of New York City, succeeding Dr. Andrew Edson retired on pension. Mrs. Forsythe is the first woman to be chosen for this position.

—Mr. Frank Adams, for the past five years superintendent of schools at Havelock, Neb., has accepted a position on the faculty of the Milwaukee Normal School at Milwaukee, Wis. Mr. Adams will have charge of the organization of a special course of study and the systematizing of the educational department.

—Mr. Lyman C. Hunt, of Barre, Vt., has been elected superintendent of schools at Burlington, at a salary of \$3,500 a year. Mr. Hunt has a degree from the University of Vermont and has had an extensive teaching experience in New England.

—Supt. E. C. Broome of Philadelphia has been unanimously reelected for a term of one year.

—Dr. A. G. Ireland, of the University of Kentucky, has recently become State Commissioner of Physical Education and Health for the public schools of Connecticut.

—Supt. Allen P. Keith of New Bedford, Mass., has announced his resignation, effective with the close of the school year.

—Supt. Frank O. Draper of Pawtucket, R. I., has been reelected for another year.

—Mr. Lee J. Gillis of Des Moines, Ia., has been elected superintendent of schools at Rock Valley.

—Mr. Ralph E. Gowan of Winfield, Kans., has been elected superintendent of schools at Hutchinson.

—Mr. J. H. Hilliard of Manchester, Ia., has been elected superintendent of schools at Estherville.

—Mr. Frank A. Gause of Bay City, Mich., has announced his resignation, effective on June 30th.

—Mr. Harry Phipps of Danvers, Mass., has been elected superintendent of schools at Whitinsville, at a salary of \$4,000.

—G. C. Brown of Thompsonville, Conn., has been elected superintendent of schools at North Adams, Mass., at a salary of \$4,000. Mr. Brown

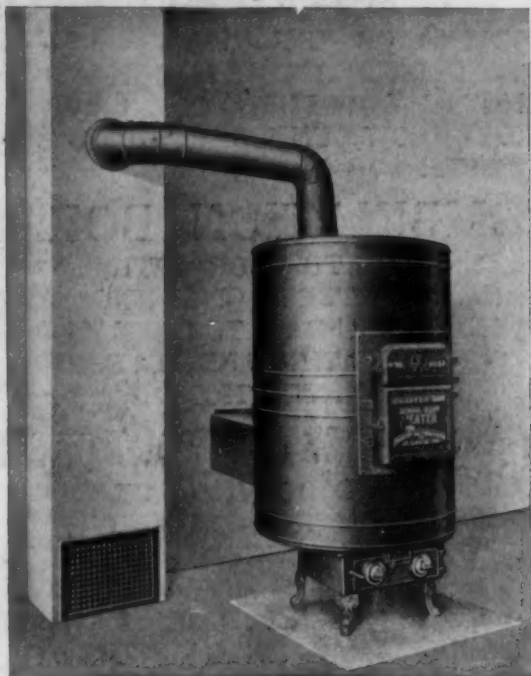
IRA B. BUSH,
Superintendent of Schools of Erie, Pa.
Mr. Bush has resigned to enter business
in his native state of West Virginia.

Charter Oak School Room Heater

PERMANENT AS THE BUILDING ITSELF

A Sanitary, Heating and Ventilating Furnace for Schools

The Jacket or Casing is built of Sheet Steel, lined with asbestos to prevent direct heating of room.



We can also furnish with Door Casing.

EASY TO INSTALL

Anybody handy with tools can do it.

POWERFUL HEATER

As easy to operate as an ordinary heater, in fact easier than most of them because this one has such perfect draft control.

MANY YEARS OF SERVICE

can be depended upon because the Charter Oak is thoroughly well made throughout from the best materials and by the most skilled workmen.

DESCRIPTIVE CATALOG

giving full information will be mailed upon request.



Showing the Heater without Casing. Complete draft regulation. BURNS WOOD OR COAL.

We also make WARM AIR FURNACES and other Styles of School Room Heaters, also RANGES to use gas, coal or wood FOR DOMESTIC SCIENCE CLASSES.

Charter Oak Stove and Range Co.

Antelope St.
and Conduit.

St. Louis, Mo.

succeeds B. F. Merriam, who has accepted the superintendency at Framingham.

—Supt. H. Claude Hardy of Fairport, N. Y., on January 30th, was unanimously tendered the position of superintendent at North Adams, Mass. Mr. Hardy was obliged to reject the position following the refusal of the Fairport board to release him from his contract. This is the third time Mr. Hardy has been favorably considered for a city superintendency.

—Mr. George C. Bowman has been named to fill the position of superintendent of schools at North Adams, Mass., succeeding B. J. Merriam resigned. Mr. Bowman is a graduate of Williams College and holds a degree from Yale University.

—Newton C. Dougherty, former superintendent of the Peoria, Ill., schools died January 24th at Greeley, Colorado, at the age of 78. While at Peoria he became identified with a bank and was charged with a criminal manipulation of the school board funds. He was convicted and sent to prison for five years. After his release he went west and won his way to a position of trust and prominence in Colorado.

Founders' Day at the Indiana State Normal School, Terre Haute, was most fittingly observed on January 6th with the inauguration of Mr. Linnaeus N. Hines as President of the institution. Noted educators were present from all parts of the country to assist in the ceremonies and addresses were given throughout the day and evening by men interested in the progress of the school.

President Emeritus William Wood Parsons presided at the morning sessions. Benjamin J. Burris, state superintendent of public instruction, addressed the gathering on the subject "The function of the Normal School," and Dr. A. E. Winship of Boston, discussed "The New Mission of Normal Schools."

Mr. S. M. Keltner presided at the afternoon sessions. President Emeritus Parsons made some remarks upon withdrawing from the presidency, and President Hines delivered his inaugural address. Messages of congratulation were extended on behalf of the alumni by President John E. McGilvrey of the Kent Normal School, Kent, O.; by President Robert J. Aley of Butler College, and by Dean Henry L. Smith of Indiana University.

President Hines presided at the evening sessions. Mr. Martin G. Brumbaugh, formerly governor of the state of Pennsylvania, spoke on "The Current Concerns of Education." The day was closed with the singing of "Indiana" by the audience.

Mr. Ernest W. Fellows, of Framingham, Mass., has been elected superintendent of schools at Gloucester.

SUPERINTENDENT BUSH RESIGNS.

Mr. Ira B. Bush for the past seven years superintendent of schools at Erie, Pa., has resigned to enter business in West Virginia.

Mr. Bush was born in West Virginia, received his common school education in the schools of the state and later completed his professional training at the West Virginia Normal School, Vanderbilt University and the University of Pittsburgh. He was for four years superintendent of schools at Parkersburg, before going to Erie. Mr. Bush has been active in the educational affairs of West Virginia and Pennsylvania and also served in various capacities in the National Education Association. He has contributed liberally to a number of educational journals.



—Mr. James Bonar has been reelected superintendent of school buildings at Pittsburgh, Pa., at a salary of \$6,000 per year. Mr. C. M. McKee was also reelected superintendent of supplies at a salary of \$6,000.

—Mrs. Dan F. North has been elected president of the board of education at Bellingham, Wash. Mrs. North is the first woman to fill this position on the local board. She is a native of Indiana and holds a diploma from the Indiana Normal School.

—The school board at Deshler, Ohio, has reorganized, with the following officers and mem-

bers: President, Mr. H. W. Buckley; Vice-President, Mr. R. W. Buck; Clerk, Mr. S. A. Jones; Mr. Charles Gorsuch; Mr. L. L. Baughman and Mr. A. F. Hayman.

—Mr. J. F. Cameron, an experienced accountant and businessman has been employed as clerk and business manager for the board at Beloit, Wis. The administrative work of the business department has been reorganized, with Mr. Cameron in charge of the accounting of funds, the purchasing of supplies and the supervision of building and repair. The new arrangement relieves the board of much detail work and leaves the superintendent free to give his attention to the more professional duties of his position.

—Mr. William L. Smack has been reelected clerk of the board of education at Springfield, O. Mr. J. William Deam was also reappointed as business manager.

—Dr. Gilbert L. Bailey, chairman of the county board of Fayette County, Kentucky, whose membership was contested, was declared entitled to a certificate of election in a decision handed down by the Circuit Court of Fayette County.

—Mr. Thomas E. Goodwin, clerk of the school board of Helena, Mont., for more than a quarter of a century, died on January 10th following an attack of pneumonia.

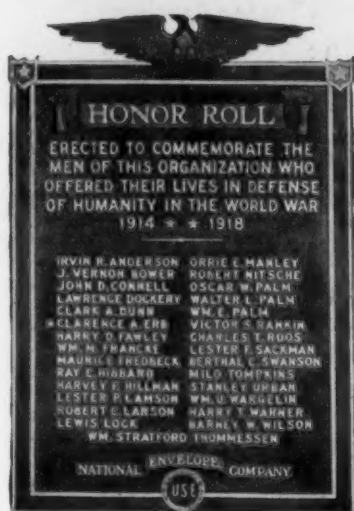
—Mr. George H. Rickes has been elected superintendent of buildings for the board of education of Indianapolis, succeeding C. W. Eurtan.

—Mr. Walter Twinn, an examiner of the Indiana State Board of Accounts, has been elected business director of the Indianapolis board of education, succeeding Ralph Douglass. Mr. Ralph McCarty has been made purchasing agent.

—Mr. J. J. Hindson has been appointed clerk of the school board of Helena, Mont., succeeding the late T. E. Goodwin.

—Mr. Robert G. Bruce has been elected business manager of the board of education at Wilmington, Del. It is expected the new official will be able to render a great deal of assistance in connection with the new building program.

The election of Mrs. Carrie G. Hutchinson to the Lakewood, O. school board was declared void because she acted as an election clerk while she was a candidate.



Furnish us the material you wish embodied in a Memorial Tablet, and we will prepare complete sketch for your approval before making the tablet.

Erect a Fitting Memorial Tablet or Bronze Sign on Your School

No more permanent memorial can be erected to those who have taken a prominent part in any institution or great public movement than an Imperial Bronze Sign or Memorial Tablet.

It endures forever—it is worthy of those whose enterprise it represents.

For a score of years we have been making Bronze Signs of superior character, fittingly interpreting the high ideals of those who wish to leave lasting memorials.

A complete catalog and suggestions will be sent upon request.

Imperial Brass Mfg. Co.

1215 W. Harrison St., Chicago, Ill.

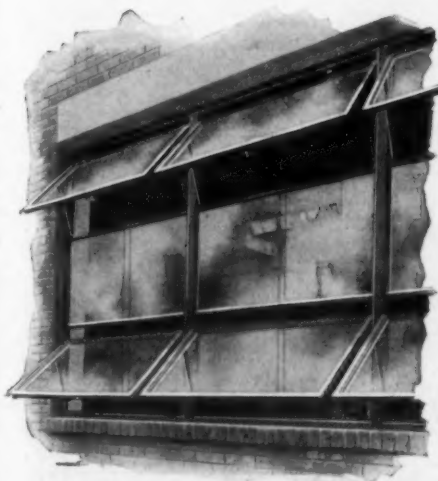
IMPERIAL WATROUS PRODUCTS

Lupton

INVESTMENT VALUE

PROJECTED SASH

The windows with all-service ventilators



Open out from bottom of ventilators (see illustration) or in from the top, as specified. Both may be used in same window: e. g., upper ventilator to open out, acting as rain shelter; lower ventilator to open in, acting as wind shield. Either can be reversed for washing from inside.

Made of solid steel bars. Easy to operate. Cannot swell, shrink or warp.

The ideal window for the average school at a very moderate price. Write for Bulletin.

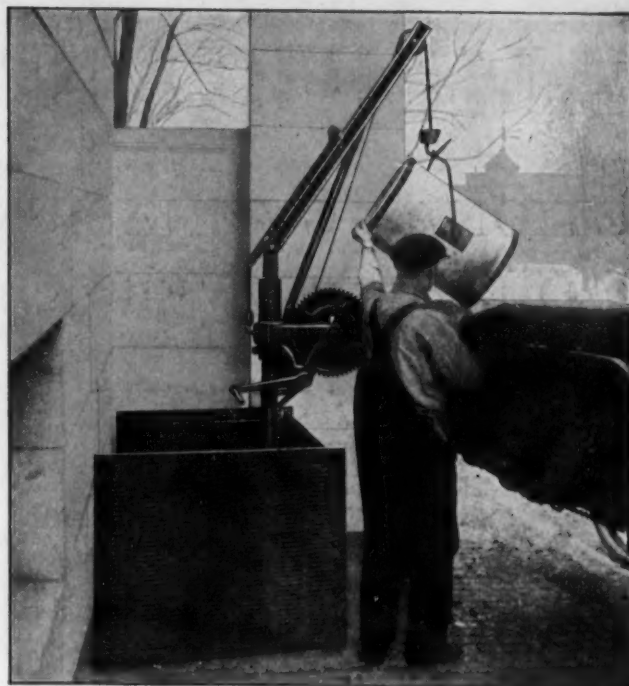
DAVID LUPTON'S SONS COMPANY

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A One Man Job With this G & G Hoist

THIS G&G Model B Hoist operates manually. One man, without leaving street level, can hook and raise filled cans to height of wagon top, then dump ashes, lower can, hook another can, and repeat operation. 5 or 6 cans can easily be emptied in this way—an average accumulation.

The overhead crane does away with re-handling at grade level. Note how cellar opening is protected, making it impossible for pupils or pedestrians to sustain injury due to the opening in sidewalk.

For maximum safety and economical one man operation, it is necessary to install complete G&G equipment. This includes, in addition to the Hoist, Sidewalk Doors, Spring Guard Gates, Automatic Door Opening and Closing Device, Operator's Iron Ladder, Electric Warning Bell, Swing Bail Ash Cans and Ash Can Truck. All municipal requirements are complied with.

Investigate this modern method of ash removal. When writing please tell us height of lift, quantity of ashes to be removed and how often, and location of driveway. A rough sketch will help, or if you prefer, talk it over with your architect. He is familiar with this Hoist and has our catalog in his file.

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551 West Broadway, New York

Makers of

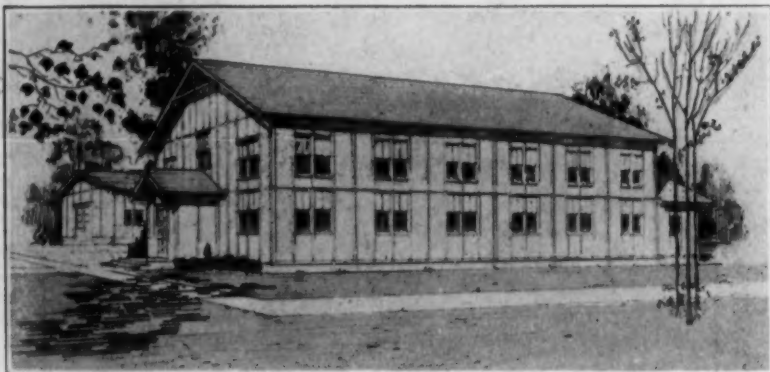
The
G&G

REG. U.S. PAT. OFF.
Telescopic Hoist
with Automatic Gear Shifting Brake
Device and Silencer

"AMERICAN"

SECTIONAL GYMNASIUMS

QUICK DELIVERY



Gymnasium No. 512. Size 44 x 76'. 16 ft. overhead clearance. Regulation Basketball Court. Boys' and girls' dressing-rooms.

Standard Models "AMERICAN" Gymnasiums

Catalog No.	Size	Overhead Clearance
505	25 x 71'	9 or 10 ft.
506	31 x 59'	10 or 12 ft.
510	38 x 63'	16 ft.
511	44 x 63'	"
512	44 x 76'	"
513	56 x 63'	"
514	56 x 76'	"

Construction meets strictest building requirements. Heavy roof trusses and supporting posts. Roof-sheathing and walls in panels. Double floor with heavy joists. Top floor vertical grain fir. Weathertight, insulated walls.

COMPLETE MATERIALS—doors, windows, roofing, rough and finish hardware; outside walls and trim primed white.

Materials carefully manufactured and fitted, ready for quick erection.

"AMERICAN" buildings save you 40% of ordinary construction cost.

We specialize in standardized, factory-built schools, teachers' cottages and other buildings for school uses. Send for catalog, blue-prints and prices f. o. b. your city.

AMERICAN PORTABLE HOUSE CO.

4098 Arcade Bldg.,

Seattle, Wash.

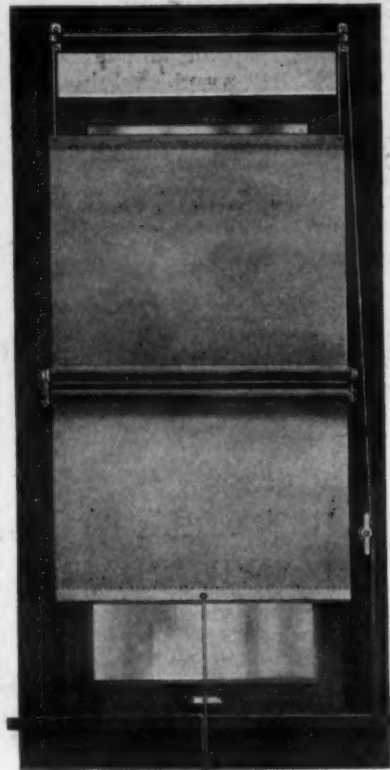
Agents for Ohio: Educational Supply Co., Painesville, Ohio.

Maxwell's Dependable Window Shades.

For Better Health and Greater Efficiency,
use

AIRANLITE CANVAS SHADES

(Formerly Called Dura Double Roll)



AIRANLITE SHADE
with Airanlite Patented Fixtures.

with
AIRANLITE (patented)
Fixtures on all school
room windows.

They are efficient, good looking, economical, trouble proof, and will last for years; can be adjusted instantly for ventilation requirements and varying light conditions.

Have many superior features, including patented light stop that keeps out light between the rollers.

Can be ordered from leading school supply houses or write manufacturer for detailed circular regarding this ideal schoolroom shade.

Can also be made of any regular window shade material.

S. A. MAXWELL & Co.

DEPENDABLE WINDOW SHADES

New York

Pittsburgh

Chicago

Kansas City

The "SIM PULL" Patented Shade Regulator

For Mounting Single Canvas Shades

— ADJUSTABLE —

EFFECTIVE AND INEXPENSIVE

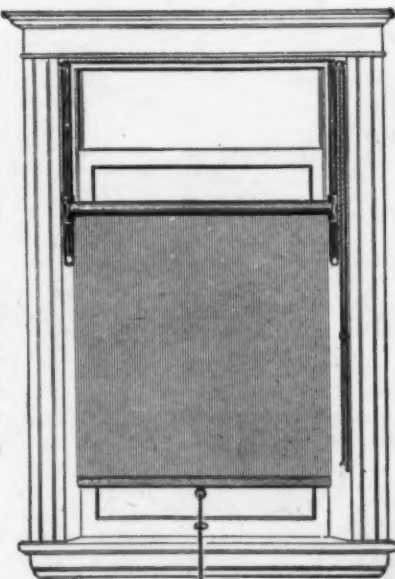
For use wherever an adjustable shade is desired.

Used with our special quality canvas, it makes a window shade that for convenience, usefulness and lowness of price is unexcelled.

Can be furnished with shades made of any regular window shade material.

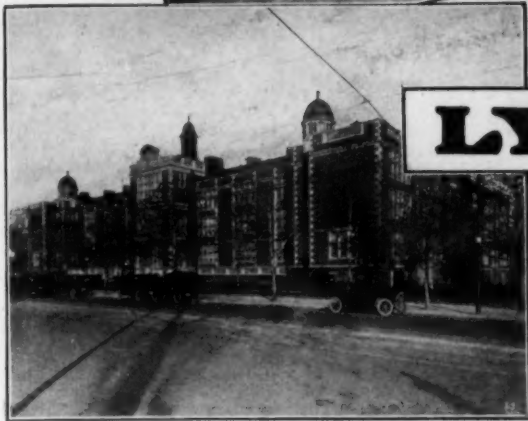
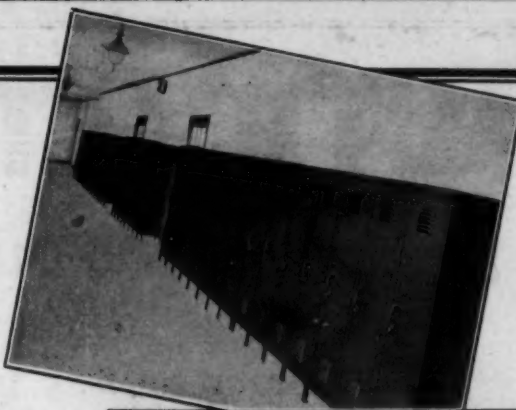
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Single Shade With "Sim-Pull" Patented
Fixture.

Maxwell's Dependable Window Shades



LYON



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WHERE EQUIPMENT OF QUALITY IS DESIRED • WHERE DETAILS OF CONSTRUCTION
AND ARRANGEMENT DEMAND AN ORGANIZATION OF EXPERIENCE AND CAPABILITY.
WHERE A UNIFORM AND SATISFACTORY INSTALLATION IS ESSENTIAL.
LYON METALLIC MANUFACTURING COMPANY
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School Hygiene Notes

The Power to Exclude Pupils.

An interesting case has been decided in Chicago. Owing to a threatened smallpox epidemic, twelve children were excluded from one of the schools because the parents refused to have their children vaccinated. Each parent sued in the sum of \$10,000, but the court decided against them. The judge, in rendering his decision, added:

"I do not believe an authority can be found in these United States that would subject a teacher or principal, or a superintendent of schools to damages for excluding a child, even though he did it without authority, if he acted without malice, and that means malice in the ordinary sense of the word—an act done with some wrongful motive. It won't do to say that every time a public official acts, someone is going to sue him. If that was the case, he would never act. I think the Superintendent of Schools in this case is to be commended for the attitude taken. 'Public officials have a right to be guided by what science has demonstrated to be as near the truth as truth can be ascertained, and science has come to the conclusion universally that vaccination is a preventive of smallpox, notwithstanding that some people may differ with it. Science has agreed upon that proposition and I think the Supreme Court of this state properly has said so, in view of the experience of years, ever since Jenner discovered vaccine.'"

The parents of this child have a constitutional right, and if they do not want their child vaccinated, he does not have to be vaccinated, when he goes to the public school they must recognize the greatest good to the greatest number; and if there is danger of smallpox, it is the duty of the Superintendent of Schools to see that children are vaccinated or that they are excluded from the schools until such time as

there is no longer any danger of the disease spreading."

Physical Standards for Children.

The United States Public Health Service has for some time been engaged in an investigation of physical standards for children. The common test of a child's health development, and about the only test that can readily be applied to children in mass, is to ascertain by some standard table of age-weights, whether or not they weigh as much as they should at their particular age. If the child is ten per cent or more under the standard, it is considered to be undernourished and is treated accordingly. These standard tables are largely approximations but they serve a useful purpose, pending the establishment of more accurate and scientific standards, by calling attention to individual children and causing a more careful examination to determine whether the standard weight is due to a remediable cause.

The Public Health Service has made studies of the physical development of normal children in different states and has accumulated data to serve as a basis for a possible general standard or for a number of standards which may apply to more or less homogeneous parts of the country, and may indicate far more accurately, the physique of the normal child by which the condition and nutritive needs of the particular child may be judged.

These studies comprise the making of physical measurements of children, and of collating them according to race, sex, age, habitat, and ancestry. The data obtained will help to determine the influence of the different racial types and of immigration as a whole on the national physique. In this work the Public Health Service has obtained the cooperation of several of the educational and health authorities in the large cities, and in many rural counties of the state directors of child hygiene. The work and association will be extended in other cities in the near future.

In one state, Florida, a state-wide investigation is now in progress, covering children's problems, particularly the effects of physical defects and septic mouth conditions in nutrition and development, which is being supplemented by careful physical examinations and measure-

ments in two counties of all school children. From this study it is hoped to evolve a standard for the entire state and region.

SCHOOL MEDICAL SERVICE IN ENGLAND.

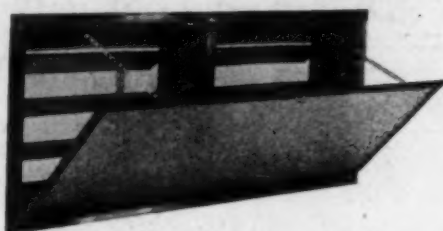
The annual report of the chief medical officer of education according to the London Correspondent of the Journal of the American Medical Association, shows the extent to which the school medical service has grown in a few years. During the year 1920-1921, the children who attended the public elementary schools of England and Wales numbered 5,187,000. Of these, approximately 2,400,000 were medically examined during the year, in three groups, at the ages of 5, 8 and 12 years, the first age being that of entry and the last that of leaving school. The medical staff consists of about 800 whole-time medical officers, many of whom are also health officers, and 730 part-time medical officers. These are employed in 900 school clinics; but many others are engaged in the 391 hospitals which undertake some of the school work. In addition to the regular examination of the children at the stated ages, sick and ailing children are especially examined. When the school medical service was started, three disadvantages were anticipated; that it would pauperize the parent and destroy the sense of parental responsibility; that it would impose an unremunerative burden on the ratepayers, and that it would have a detrimental effect on the work of the private physician. According to the report, none of these have been realized. Parental responsibility has been stimulated, the investment is yielding a high interest, and medical treatment has been so safeguarded as to secure the support of the profession. The school medical service is not duplicating but supplementing and enhancing the work of the private physician. An important indirect effect of the service is that it has taught the educationist that children must be handled as individuals and not in bulk. A growing interest of teachers and parents in the health of children is evident. The teachers have great influence in persuading parents to have defects in their children attended to. It is becoming the custom for school medical officers to undertake collective investigations into the health of children.

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THE LOGICAL VENTILATOR FOR SCHOOLS

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THE MODERN VENTILATING SYSTEM

NOISELESS — PRACTICAL — INEXPENSIVE

NO OPERATING OR MAINTENANCE COST

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BALTIMORE, MD.

TERRITORY AVAILABLE TO RESPONSIBLE SALES ORGANIZATIONS.

Of the 2,400,000 children examined, no less than 47.9 per cent were suffering from defects. A comparative investigation was made of groups of children classified according to environment as follows: industrial areas, residential towns and rural areas. The curious result was that the percentage of defects was smallest in the residential towns, while the rural areas were scarcely ever better than the industrial towns or than London; indeed, in diseases of the nose and throat, they showed the highest return of all four groups. The amount of dental defects is enormous; 70 per cent of the children required treatment for caries. The number of abnormal children, exclusive of dull and backward ones, is estimated at 164,500. Of these, 37,000 are mentally defective, 6,500 are epileptics, 36,000 are cripples, 20,000 have pulmonary tuberculosis, 6,000 are blind and the same number are deaf.

HYGIENE AND SANITATION.

—Rochester, Minn. A full-time nurse has been employed, in addition to a lady attendance officer who also assists the nurse. A school car is at the disposal of the nurses.

—Lockport, Ill. The school board has recently purchased an eleven-acre tract of land to be used as an athletic field.

—Dr. C. Hampson Jones, health commissioner, has been authorized to organize his force of assistants for medical work in the public schools of Baltimore. He is to appoint three women physicians and three men physicians at \$1,000 each a year for the physical examinations of pupils in the high schools, and a part-time psychiatrist, at \$1,800 a year, to examine children who are defective and not proficient in their studies. This official is to work in the schools two hours daily for five days a weeks during the school year. Later, six more women physicians and six men physicians at \$100 a month for three months will be engaged.

DROP IN CONSTRUCTION COST.

—Bids were opened last month by architect W. L. Alban of St. Paul, Minn., for a junior and senior high school to be built at Olivia, Minn., showing a decided reduction in cost over 1920. The comparative prices on bids taken in 1920

and 1922, figured on the same basis, showed the following.

	1920 April 30	1922 Jan. 26
Date of Taking Bids.....	5	19
No. of Bidders, General Construction.....	4	18
No. of Bidders, Heating and Ventilating.....	4	16
No. of Bidders, Plumbing.....	3	15
No. of Bidders, Electric.....		
General Construction Bid.....	\$166,760.00	\$ 98,100.00
Heating and Ventilating Bid.....	22,490.00	16,573.00
Plumbing	11,698.00	8,552.00
Electrical Work	5,760.00	3,800.00
Total Cost	\$206,708.00	\$127,025.00
General Construction per cu. ft.....	\$0.2529	\$0.1416
Mechanical Work per cu. ft.....	0.0606	0.0418
Total	\$0.3135	\$0.1834
General Construction, percentages.....	100%	56%
Mechanical work, percentages.....	100%	69%
Total Building	100%	58 1/2%
Compared with 1916 prices (taken at 100%).....	209%	122%

The above is a comparative analysis of bids taken in 1920 and in 1922 on the same building from same plans and specifications. Amounts of bids have been rectified so as to bring both on same basis. The results show that building costs in general are 41 1/2 per cent lower than in 1920 and but 22 per cent higher than in 1916.

AARON PALMER PASSES AWAY.

A schoolmaster who rendered a remarkable service to the cause of popular education was Aaron Palmer who ended his career on January 29th. He had served as teacher and superintendent in several Iowa communities, but was best known in his own state for his long and splendid career as superintendent of the Marshalltown schools.

He was a native of Mt. Carroll, Ill., where he was born December 26, 1860, and began to teach school at an early age. His first work of importance was to serve as principal of the high school at Savanna in his native county. After teaching at Oxford Junction his first work in Iowa, he became superintendent at Anamosa, where he met the woman who became his wife, Miss Maude Humphrey, a teacher in the Anamosa high school.

Thereafter he became superintendent of the Maquoketa schools and after remaining here

five and one half years came to Marshalltown. He began his superintendency labors at Mar-

shalltown January 1, 1907, remaining until July 1, 1921 when he retired completing a service of fourteen and one half years. His administration was characterized by painstaking and progressive work. Under his direction the school system grew up to most gratifying standards.

Mr. Palmer was generally and favorably known in a national way, but Iowa knew him well and esteemed him as a schoolmaster who contributed more than an ordinary man's share to the cause of education.

Besides being an educator of unusual force he also gave liberally of his time and effort to religious and civic work in Marshalltown. In his youth he secured more than a local reputation as an amateur baseball player. Thus, all his life he fostered healthful sports as well as high intellectual and moral standards.

The name of Aaron Palmer will live in Iowa as a remarkable educator and useful citizen and an ideal man.

While tempted success, another year with been given In app relative matically efficiency With the rated on plan, sep cipal. E if she ch same for three and for effieci intendent they so d two. Under rated by ently rem rating of sideration the plan l ergetic te without t teacher w enthusias As a pa year, a be mined by dent, is g tion is ba Basis of As a pa year, a bo mined by will be g dation w For gradu \$200 For gradu Normal For every year Nor

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FAIRPORT BONUS SYSTEM.

While systems of bonus awards have been attempted in a few places, generally without much success, the Fairport, Ohio, schools have tried another bonus award plan. This is the second year with the operation of the plan which has been generally considered a success.

In applying the plan, the items of the bonus relative to training and experience are automatically determined. The rating of the item of efficiency is handled in the following manner: With the exception of principals, all teachers are rated on the Chicago University teacher rating plan, separately by the superintendent and principal. Each teacher is also given opportunity, if she chooses, of rating herself on a copy of the same form. An average is then taken of the three and this constitutes the teacher's rating for efficiency. Principals are rated by the superintendent and by themselves individually, if they so desire, and an average is taken of the two.

Under the plan, the sting of being arbitrarily rated by principal and superintendent is apparently removed by the personal and individual rating of each teacher by herself, which is a consideration necessary to the willing acceptance of the plan by the corps. It is possible for the energetic teacher to be rewarded in a measure without the necessity of a like reward to the teacher who does not show the same degree of enthusiasm and hard work.

As a part of the total compensation for the year, a bonus the size of which will be determined by recommendation of the superintendent, is given each teacher. The recommendation is based upon the following points:

Basis of Bonus Award to Teachers—1921-22.

As a part of the total compensation for the year, a bonus the size of which will be determined by recommendation of the superintendent, will be given to each teacher. This recommendation will be based upon the following points: For graduation from a four year college course \$200

For graduation from a standard two year Normal course or its equivalent..... 100
For every six weeks' attendance above a two year Normal Course 5

For every six weeks' attendance as undergraduate at a Normal School, or its equivalent 5
For each year of successful experience up to 3 years, \$5.00 totalling 15
For each three years of additional experience or major fraction thereof, (up to a total of \$30) 5

According to efficiency in classroom, building, playground, etc., as ranked..... \$40
According to willingness to cooperate in various desirable ways 40
According to attitude toward supervision, suggestion, children, parents, community and general loyalty to work..... 40
Maximum bonus possible \$450

BOARDS OF EDUCATION.

—Seattle, Wash. The school board, upon advice of its attorney, has denied a claim for medical services to a pupil injured in one of the manual training classes. Under a state law no action may be brought against a school district or its officers for act or omission of the district relating to a playground or manual training shop.

—The new school board at Memphis, Tenn., has chosen L. C. Humes as its president.

—The sentence passed upon nine members of the Chicago board of education as constituted in November, 1920, has been confirmed by the appellate court. The sentence inflicts a money fine ranging from \$500 to \$750, upon three women members and money fines of from \$250 to \$300 together with imprisonment of from one to three days upon six male members. The defendants have now appealed their cases to the supreme court. The trouble arose over the removal of Superintendent Chadsey before the expiration of his contract with the board.

At Newark, N. J., a school principal sent two children home to have their faces washed. The father then came to school and raised a row over the matter. The local judge gave the parent five days in jail on the charge of disorderly conduct.

The school motor bus has evidently tried to keep pace with other auto vehicles in the matter of accidents. Recently seventeen Brooklyn children riding in a school bus which collided with a

trolley car, had a narrow escape. In Indiana several children were killed during the past year by school motor bus accidents. In California twelve children were killed.

A survey of the West Virginia schools has been made by the United States Bureau of Education. In speaking of the school system of Wheeling, the report holds that its fundamental weakness

Exc.	Good.	Fair.	Unsat.	Poor.
\$40	\$30	\$20	\$10	\$00
40	30	20	10	00
40	30	20	10	00
				\$450

lies in executive management by laymen. "Let the business men on the board imagine," says the report, "what would happen to a bank, or store, or factory, if it were managed by a committee of outsiders who dipped into the business for, say, two hours each week. The conduct of a big school is a more complex, difficult and technical job than merchandising or banking."

—Mr. B. O. Duggan, State High School Inspector of Tennessee, has resigned to accept a position in the education department of the State University. Mr. Duggan entered upon his duties on February 10th.

—Mr. Duggan's direction of the high schools of the state has been particularly successful. He has regularly visited each first-class high school of the state and many of those of lower rank. He has encouraged principals and teachers, and through his wise counsel and suggestions has greatly stimulated the high school situation. The enrollment in the high schools, the number of graduates and the number of teachers have substantially increased. The system of grading inaugurated by Mr. Duggan has had a good effect in raising the standard of high schools of the state.

—Mr. Thomas S. Weaver, superintendent of schools of Hartford, Conn., since 1900, died February 8th. Mr. Weaver was a newspaper man prior to accepting the superintendency of the city schools.



The life of your blackboards depends largely on the chalks you use

Waltham and Hygieia have never scratched a blackboard

IT has cost perhaps many hundreds of dollars to equip your school with good blackboards. You bought good boards because you knew that in the end it would be economical. Being good they should last for several lifetimes without appreciable wear.

But are they wearing? Are they giving you the service you had hoped for—and had a right to demand?

There is one thing which will ruin even the finest of blackboards. That is inferior chalk—chalk filled with grit and other foreign substance. When you erase a blackboard, you cannot erase the scratch left by a gritty chalk.

There is one chalk which, ever since it was first produced in 1835, has never caused damage to a blackboard. For more than eighty-five years it has been the standard by which all other blackboard chalks have been judged. This is Waltham Chalk.

Made of imported materials, it leaves a fine soft mark that is whiter than that of any other chalk. Guaranteed absolutely free from grit, Waltham is finished in Waltham white and Waltham yellow enamel, the enameled chalk being identical with the white except for its enamel covering.

The finest of all dustless chalks

In some schools a dustless chalk is pre-

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Unlike many other dustless chalks, Hygieia is free from grit and clay—free from any substance which will cause a blackboard to shine and turn gray. Containing 95% pure precipitated English chalk, it leaves a broad white mark on the board.

In breaking-machine tests Hygieia proves to be stronger than any other dustless chalk. Uniform in quality, economical, durable, it has never failed to give perfect satisfaction.

In deciding on the chalk you are to use in the future, consider this fact that has been proved in hundreds of schools throughout the world—that a few cents saved in the purchase of an inferior and gritty chalk costs you several dollars in the depreciation of a blackboard.

These and other chalks made by The American Crayon Company have stood the rigid tests of school usage for years. American Crayon Company products are the result of almost a century of successful manufacturing experience. Made in the largest and most thoroughly equipped factories of their kind, these products are sold at the lowest possible cost consistent with the highest quality.

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AVERA

—The Bureau tables a school t The sala cording following

U. S. ...
Calif. ...
Ariz. ...
Nev. ...
S. Dak. ...
Wyo. ...
Okla. ...
N. Mex. ...
Mich. ...
Colo. ...
N. Dak. ...
Nebr. ...
Utah ...
Wis. ...
Wash. ...
N. J. ...
Idaho ...
W. Va. ...
Ill. ...
Iowa ...
Kans. ...
Ore. ...

U. S. ...
Calif. ...

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Teachers' Salaries

AVERAGE SALARIES OF HIGH SCHOOL TEACHERS.

—The Statistical Division of the United States Bureau of Education has recently compiled tables showing the average salaries paid high school teachers in the United States in 1921. The salaries which are arranged in groups according to the size of cities are shown in the following table:

Cities. 2,500 to 10,000 population.		
U. S.	\$1,520	Vt. 1,530
Calif.	2,045	Ohio 1,524
Ariz.	2,020	Mass. 1,520
Nev.	1,809	Minn. 1,513
S. Dak.	1,752	La. 1,498
Wyo.	1,740	Ind. 1,453
Okla.	1,660	N. Y. 1,442
N. Mex.	1,660	Ark. 1,420
Mich.	1,658	Penna. 1,414
Colo.	1,648	Fla. 1,413
N. Dak.	1,635	N. C. 1,361
Nebr.	1,631	N. H. 1,353
Utah	1,606	Ga. 1,350
Wis.	1,605	Maine 1,316
Wash.	1,604	Mo. 1,314
N. J.	1,604	Miss. 1,293
Idaho	1,597	Texas 1,235
W. Va.	1,595	Va. 1,227
Ill.	1,591	Ala. 1,227
Iowa	1,549	Tenn. 1,211
Kans.	1,541	Ky. 1,181
Ore.	1,539	S. C. 1,181
Cities 10,000 to 30,000 population.		
U. S.	\$1,738	Ariz. 2,124
Calif.	2,255	N. J. 2,092

Mont.	1,989	Ill.	1,630
Mich.	1,879	Va.	1,631
S. Dak.	1,877	R. I.	1,582
Idaho	1,814	La.	1,555
Wash.	1,800	N. Mex.	1,550
Conn.	1,799	Miss.	1,509
Okla.	1,798	N. C.	1,501
N. Mex.	1,789	S. C.	1,480
Ohio	1,786	Penna.	1,462
N. Dak.	1,737	Vt.	1,402
Wyo.	1,737	Ark.	1,389
W. Va.	1,729	Md.	1,375
Iowa	1,728	Texas	1,373
Mass.	1,719	Ala.	1,325
Kans.	1,717	Maine	1,315
Minn.	1,714	Ky.	1,304
N. Y.	1,692	Ga.	1,263
Ind.	1,688	Mo.	1,262
Colo.	1,683	Tenn.	938
Wis.	1,666		

Cities 30,000 to 100,000 population.		
U. S.	\$1,847	Wash. 1,820
Calif.	2,282	Del. 1,796
Okla.	2,135	Colo. 1,793
N. J.	2,069	N. Y. 1,760
Ohio	2,067	Ill. 1,713
Conn.	2,030	R. I. 1,706
W. Va.	2,028	Utah 1,669
Wis.	2,009	Penna. 1,660
Mass.	1,948	Nebr. 1,610
Kans.	1,939	Va. 1,540
Minn.	1,922	N. H. 1,525
Ga.	1,920	Me. 1,481
Ind.	1,893	Mo. 1,459
Mich.	1,889	Tenn. 1,456
Ark.	1,883	Ala. 1,355
Iowa	1,873	Texas 1,323
		Ky. 1,079

Cities 100,000 population and over.		
U. S.	\$2,484	Mo. 2,463
N. Y.	3,181	Penna. 2,400
N. J.	2,681	Ohio 2,377
Ill.	2,552	Mass. 2,343
Ind.	2,527	Calif. 2,330

Mich.	2,251	Colo.	2,019
Wis.	2,231	Nebr.	1,970
La.	2,228	Conn.	1,950
Wash.	2,191	Ky.	1,931
D. C.	2,165	Ore.	1,920
Md.	2,136	Ga.	1,743
R. I.	2,085	Va.	1,639
Minn.	2,034	Ala.	1,586

ABSENCE RULES FOR TEACHERS.

The board of education of New York City has recently issued a Teachers' Handbook which gives the details governing excuses for absence with pay. Excuse for absence with pay, may be granted for the following causes:

- (a) Serious personal illness;
- (b) Death in the teacher's immediate family.
- (c) Compliance with the requirements of a court.

Under clause (a) the maximum time for which the applicant may be excused with pay in a calendar year is twenty days. The superintendent may, at his discretion, and where the case is a deserving one, extend the twenty-day period to sixty days.

Under clause (b) three days' absence may be excused with full pay. "Immediate family" includes a parent, child, brother, sister, grandparent, grandchild, husband or wife. The application must state the relationship of the deceased to the applicant and state the date on which death occurred. No deduction may be made on the payroll, provided the principal receives from the teacher a written statement of the facts regarding the absence, and provided the teacher attaches the same to the payroll and notes the absence.

Under clause (c) absence may be excused with full pay if the applicant actually attends court under subpoena as a witness in a case to which he is not a party. The subpoena or other evidence at court must accompany the application.

—The public schools of Meriden, Conn., have this year introduced milk lunches, thrift work and a new system of classification. The school board has been reorganized in line with recent tendencies in school administration. A revision of the courses of study and teaching methods has been made to give better adaptation to individual and more effective instruction.



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SCHOOL BOARD NEWS

—Under a new law passed by the 1921 legislature of Massachusetts, the town and city of Meriden have been consolidated under a charter which reduces the number of members on the school board from twelve to five. The members will be elected at the annual election at which each party nominates, one by caucus, the other by primary, five candidates. The five candidates having the largest number of votes will be elected, the one having the largest number for six years, the two having the next highest number for four years, and the remaining two for two years. At the election, the Democrats won by a substantial majority, all the members being Democrats. All but one of the members had no previous service in relation to schools.

In the reorganization of the work of the board, the departments of instruction, finance, supplies, health and buildings have been established. Each member is assigned to a department to act as an advisor to the superintendent, who has charge of all the departments. The board meets semi-monthly.

—Johnstown, Pa. The board of education, on Tuesday, April 11th, will take action toward the election of a superintendent of schools, for a four-year term. The board is in position to receive applications from superintendents who are interested. Application blanks will be sent to any person who asks for them.

—Chicago, Ill. Supt. P. A. Mortenson has recommended that the board of education begin a study of the care of classroom floors with a view of determining whether the oiling process is justified in view of the danger to students and teachers who may be injured. The process has been used to minimize the amount of dust in the rooms but on the other hand, has the disadvantages of unsightliness and is conducive to accidents.

—Fitzgerald, Ga. The new board of education has two new members in the persons of Mrs. Frank Ward and Mr. G. C. Petty. Mrs. Ward is the first woman to serve on the board. Dr. W. D. Dorminy is president and Mr. G. A. Jolley is secretary-treasurer.

—The Cincinnati, Ohio school board will, because of a fund shortage, reduce the school

term by one week. Owing to the reduction this causes in the teachers' pay the employees of the school board business office have voluntarily accepted a proportionate salary reduction.

—An embarrassing situation has arisen in North Dakota. The constitution was changed to enable an increase in the local debt limits to the extent of five per cent. Many school systems voted bonds under this extension when it was discovered such extension is still subject to legislative action.

—By a unanimous vote C. B. J. Snyder has been re-elected Superintendent of School Buildings by the board of education of New York City. Mr. Snyder has filled this arduous position in the great metropolis for nearly twenty years.

PENNSYLVANIA SCHOOL DIRECTORS' MEETING.

The twenty-seventh annual meeting of the Pennsylvania School Directors' Association was held during the week of February 5th. Resolutions calling for a state law permitting taxation of local realty holdings of public utilities for school purposes were adopted on recommendation of the legislative committee, which also urged support for the consolidation of schools wherever practicable. The committee on resolutions commended State Supt. Thomas E. Finegan for his clear and complete statement of the plans and policies of his department, and pledged hearty cooperation in the furtherance of his work. The resolutions also called for a continuation of plans to improve the educational system; that no candidates for legislative nominations or elections be supported unless favorable to improvement of the state school system; commended summer schools and praised teachers for attendance; approved the speech improvement work of the state education department, and asked for an investigation into the delayed payments of state appropriations for schools.

Mrs. E. S. H. McCauley, of Beaver, president of the association, delivered an address at the afternoon session of the closing day, in which she lauded Dr. Finegan and his work. Mrs. McCauley hinted that certain of the attacks made against the present system might be attributed to political influences and she called for a remedy for the present situation.

Mr. C. L. Zorger, director of extension activities and evening schools of Harrisburg, explained the necessity of extension activities and told of the unjust criticism of school boards. He declared the immature and handicapped must be trained for the job if the masses are to participate in ruling themselves.

Dr. S. C. Schmucker, West Chester, in his address described "The Ideal Director" as a man of consummate leadership and a splendid man to give the directors advice in all their aspirations to meet the exacting requirements of the office.

Dr. Schmucker was followed by Supt. William W. Evans, of Columbia County, whose subject was "Putting Pep in the School Director." Dr. Schmucker declared the educational program of Supt. Finegan should put pep into all Pennsylvania educators. He hinted that the newspapers were printing untruths about the school administration for political influence. Dr. Finegan, he declared, was the only hope for the boys and girls of the Keystone state.

Other speakers of the week were Rev. Henry Nelson Bassler, Wilkesburg; Miss Adaline B. Zackert, State Library; Miss Margaret Maguire, Philadelphia, and Dr. Hollis E. Dann, director of the State Department.

Secretary Hammelbaugh reported that 634 directors of the total membership of 786 had attended the convention. Fayette County headed the list with every one its nine members present.

The sessions of the associations were closed on Friday, February 10th, with the acceptance of the report of the nominating committee and the amendment to the constitution providing that the annual dues shall be \$2 instead of \$1.

The convention accepted the report of the nominating committee as follows:

President, John H. Butterworth, Chester; First Vice-President, Mrs. William Anderson, Aspinwall; Second vice-president, Dr. J. S. Calen, Shenandoah; Third Vice-president, Rev. E. S. Linebach, Womelsdorf; Secretary, Mr. D. D. Hammelbaugh, Harrisburg; Treasurer, Mr. G. E. Reynolds, Wyoming.

Executive Committee: Mr. J. G. Pierson, Laceyville; Mr. J. K. Townsend, Wilkesburg; Mr. George B. Carson, Scranton; Dr. J. D. Orr, Leechburg, and Dr. F. C. Sandt, Easton.

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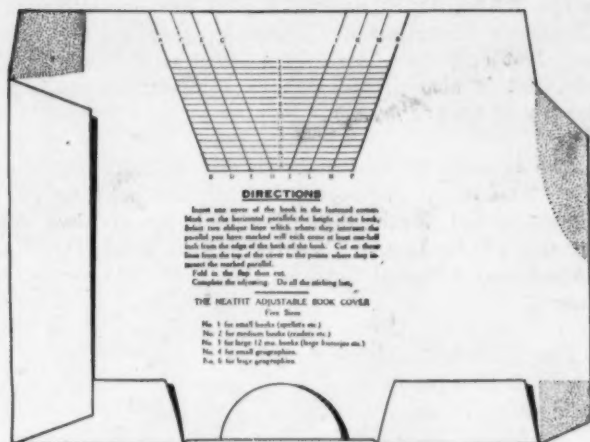
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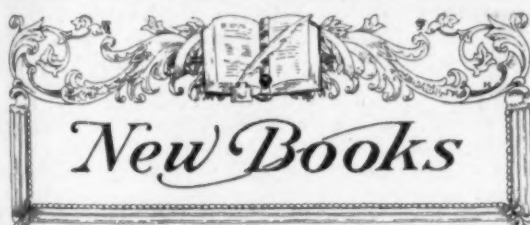
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By W. S. Miller, Ph. D. Specimen set, 30
cents postpaid. World Book Co., Yonkers, N. Y.

These tests have been worked out after six
years of experimentation with pupils in the
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The tests consist of (1) a combination of dis-
arranged sentence and directions test, (2) a con-
trolled association test, and (3) a modified re-
lations or analogies test. Each test contains
forty items. Ample time is allowed for complet-
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ordinated to that of power. The tests are pro-
vided with the usual devices for scoring—a key,
an age-grade score sheet, a manual of instruc-
tions and a formula for translating findings in-
to terms of I—Q.

Masterful Personality.

By Orison Swett Marden. Cloth, 341 pages.
Price, \$2.00 net. Thomas Y. Crowell Company,
New York.

This latest book of the editor of "Success" is
written in his characteristic inspirational style,
and brings together the author's observations
and a great amount of quoted material gleaned
from the great writers of all times. It would
be difficult indeed to make out from the author's
writings a consistent philosophy, a logical sys-
tem of psychology or ethics, a well formulated
group of religious principles, or, what the
Germans before the war were wont to term a,
Welt Anschau (world view). The material is
interesting, it reads well, and it is full of splen-
did aphorisms and neat phrases. That any one
man could embody into his daily life even a small
number of the qualities, habits, attitudes and
ambitions, is a problem that few psychologists
or teachers would admit as possible.

The Coal Manual.

F. R. Wadleigh. Cloth, 16 mo., 184 pages.
Price, \$2.50. National Coal Mining News, Cin-
cinnati, Ohio.

This book is a handy manual for users and
purchasers of coal and provides in a technical
language a vast amount of information, con-
cerning the nature and classification of the
various types of anthracite, semi-anthracite,
bituminous, superbituminous, and lignite coals.
It doesn't take up the problems of mining and
marketing coals, but it goes into great detail
concerning the preparation of coal for the mar-
ket, the purchase of coal on specifications, and
the selection of coal for specific purposes. The
author is careful constantly to bring to the at-
tention of the reader the necessity of combining
the economic problem of purchasing and using
coal with the conservation of the coal supply.

For school authorities, who are buying and
using coal, the book will be of immense interest
and value, not only for the general information
which it contains, but particularly for the spec-
ific directions which it gives for chosen coal, for
handling boilers and furnaces, and for storing
and caring for coal. A copy of the book belongs
in the reference library of every school purchas-
ing agent, secretary and supervisor of school
buildings.

Practical Map Exercises in Ancient History.

Mildred C. Bishop and E. K. Robinson. Paper,

32 pages. Price 56 cents. Ginn & Co., Boston
Mass.

This is the author's second group of exercises
and covers ancient history from the earliest re-
corded Egyptian times to the close of Charle-
magne's reign in 814. A. D. Each map is ac-
companied by a group of practical problems in
map work and a syllabus of the historical period
embraced in the study. The latter includes re-
ference dates, problems for biographical studies,
for word studies and for brief themes based on
the leading events of the time. By an ingenious
arrangement of double binding, sufficient tracing
paper is provided for two or three independent
studies of each map, to be assigned by the
teacher. The book is as useful as it is ingen-
ious.

Otis Group Intelligence Scale.

By Arthur S. Otis. Paper 80 pages. World
Book Co., Yonkers, N. Y.

This is a revision of the author's earlier man-
ual of directions for giving the primary and
advanced examinations. The tests as such have
not been changed but the norms for the advanced
examination have been slightly reduced, except
at the upper extreme, to correspond with the re-
sults of 25,000 tests which have now been re-
corded. The index of brightness has been
adopted as a measure in place of the coefficient
of brightness.

Oral Exercises in Number.

For use in grades four to eight inclusive. By
Anna L. Rice. Price, \$0.76. The Gregg Publish-
ing Co., New York, Chicago and Boston.

The present text takes the form of a supple-
mentary book for teachers in supplying drill
work in numbers from the fourth grade to the
high school. The knowledge gained from this
work is essential not only to a common-school
education but as a foundation for all advanced
work in mathematics. It, therefore, assumes
some importance in connection with the training
of pupils in number work.

As an aid to the work, the author rightly sug-
gests that only a small part of the work be at-
tempted each day. The value of the drills will be
in proportion to the interest and enthusiasm of
the class, while the main purpose—speed and ac-

ALDINE READING METHOD

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This Teacher's Manual will give you new views about the teaching of geography.

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curacy—will be maintained constantly. Considerable drill is given in addition, subtraction, multiplication, division, cancellation, factoring and multiples. For the purpose of variety, there are a number of special one-minute exercises and work in U. S. coins, addition, finding amount of purchases, denominate numbers, percentage, areas and perimeters.

The work is well graded, varied and fulsome and will no doubt be welcomed by teachers.

Butterworth School Building Score.

Devised by Julian E. Butterworth. Four pages, 8½ x 11. Price, \$1.50 per 25. World Book Co., Yonkers, New York, Chicago.

This score card provides a handy method of examining the physical condition of one teacher school buildings and their adaptability to rural educational uses. The compiler, who is professor of rural education at Cornell University, has devoted considerable time and study to the improvement of rural schoolhouses erected in New York State, and the present score card is the result of a series of methodical examinations of several hundred rural school buildings, ranging from the oldest, box-car type to the most modern approved state planned building.

The score card sets up one thousand points of value for an ideal building and considers those reasonably effective which score from 600 to 900 points. Two types of qualifications are set up. These are: The absolute essentials and the additional desirable factors which are of service but which can be omitted, without injuring any essential point in rural education.

Standards which are set up are those which have been generally accepted throughout the country in the legislation affecting schoolhouse planning and which are commonly agreed upon by architects and educators. The author is perhaps a little more generous in his recommendation for artificial light and for such accessories as a telephone, fencing, walks, etc. His requirements for the size of the school grounds are also a little beyond the average which the ordinary school district believes it can afford.

The genuine merit of the score card is its simplicity, its careful allowance for the attitude of the average farmer on school buildings, and its emphasis on the condition in which the var-

ious items of the building and its essential furnishings are kept. The card affords a very simple and useful device for the county superintendents to rate their buildings and also for survey and state report purposes.

A History of Rome to 565 A. D.

By Arthur E. R. Boak. Cloth, 444 pages. The Macmillan Company, New York, N. Y.

This work traces the history of Rome from the earliest recorded times to the death of Justinian in 565 A. D. The facts are presented in accurate textbook style and only rarely, in describing customs and social life, does the author write in a free narrative form that reflects something of the spirit and life of the times and of the people. The work is intended primarily for college courses and is complete, comprehensive and in places even minute in its statements. The author holds close to what he considers the most reliable documentary sources of history and does not reflect much of the popular views of the spirit and life of the Romans. His account of the Roman Wars is nicely balanced with his story of the constitutional and political, economic and social growth and decay of the Roman state. He rather minimizes the early Christian history and persecutions and passes over the personal and illegal nature of these movements for their strictly legal aspects. The book is illustrated with useful maps of the extent of the Roman state in its chief periods.

How To Teach Silent Reading to Beginners.

By Emma Watkins. Cloth, 133 pages, illustrated. J. B. Lippincott Co., Philadelphia, Pa.

Whatever the old-fashioned schoolmaster may say concerning the teaching of silent reading as a "new fangled" way of teaching reading for comprehension, he must admit that the methods developed in recent years have obtained astonishing results in periods of time that formerly were wasted in the most useless mechanics of reading.

In the present book a new ideal of efficiency is set for first grade reading and a most interesting and successful method involving projects is described. The author wastes no time or space in theorizing but describes what she has done and how she has done it. She gives evidence in each of the lessons of rare judgment in picking topics which are of lively interest and real value to children, of choosing words which will produce

a large, useful vocabulary, and of relating idea-producing play and work in exercises based on reading.

Detroit Kindergarten Test.

By H. J. Baker and H. J. Kaufman. Manual of Directions, Record Sheet, Examination: Form A, 8 pages. Price, 25 examination booklets with manual and record sheet, \$1.20 net. World Book Co., Yonkers-on-Hudson, N. Y.

This test, which is of the individual type intended for classifying children entering the kindergarten, is made up entirely of pictures. It brings out the child's general information, ability to distinguish similarities and differences, memory, power to see absurdities.

The test was developed in Detroit and has been used in its present form in classifying 895 children. The test conforms to the present day standard for psychological tests. It will be interesting to learn what modifications are evolved from a wide use under large city, village and rural conditions.

The Puritan Twins.

By Lucy Fitch Perkins. Cloth, 183 pages illustrated. Price \$0.88. Houghton Mifflin Co. Boston.

Here is a story dealing with the pranks, joys and mishaps of a group of children who lived way back in the Colonial days. It breathes the atmosphere of Pilgrim life with its clean living and thinking.

The twins are natural children, playful busy bodies, who encounter interesting situations and experiences. There are sea shores and forest trails, sea captains and woodsmen, dogs, horses and chickens to form the setting in which the twins play and pray, and round out a most charming child life.

PUBLICATIONS.

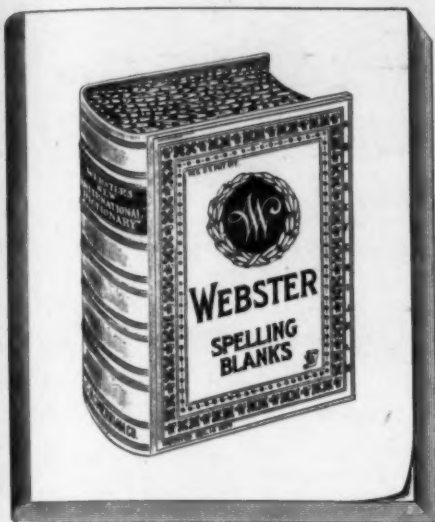
"Dangers and Chemistry of Fire" is the title of two volumes, one for primary and the other for grammar schools issued by the Department of Public Instruction of Ohio.

These volumes deal with the subject of fire prevention in the schools, and were prepared by Dr. Clarence Maris under the direction of Vernon M. Riegel, State Superintendent of Schools.

Educational Work of the Boy Scouts. L. W. Barclay, Bulletin No. 41, 1921, U. S. Bureau of Education.

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THE AMERICAN SCHOOL TAX PROBLEM.

(Concluded from Page 38)

"Unless the school is both the work and the pride of the community which it serves, it is nothing," he continues. "A school system that grows naturally in response to the needs and ambitions of a hundred thousand localities will be a better school system than any which can be imposed by the aid of grants of public money from the federal treasury, accompanied by federal regulations, federal inspection, federal reports and federal uniformities."

The federal control of the American schools is contrary to the spirit which brought them in to being and in direct contradiction to the system which has reared them to the present marvellous development and accomplishment. Therefore, no matter how well we may like the idea of digging into the national treasury in aid of our schools, the proposition is illogical and unpromising of the best results.

Let us not, in our search for new tax expedients, depart from the standards and methods which have served us so well in the past, and thereby pervert our national concepts and ideals. Let us keep the education of our children under our immediate control and thus uphold the cause of American citizenship in a manner contemplated by the builders of the Republic.

Note—This is the second of a series of articles on the "American School Tax Problem." The first appeared in the February number of the JOURNAL. The next will discuss the new sources of school revenue which are based upon accepted tax principles and promising of results.—Editor.

GRAPHIC AIDS IN SCHOOL ADMINISTRATION.

(Continued from Page 41)

of the work. He may ask for more time for the work, in which case the tack is moved to the new date of delivery, or he may announce an earlier date of completion, when the tack is moved back to the earlier date. If an inquiry

as to progress of a job comes from a purchaser or from the purchasing agent, a glance at the board will give the desired information.

In the case of equipment of a given shop, or of the completion of a given building, a progress chart similar to that used by engineers will prove helpful in visualizing the work yet remaining to be done before the entire task is completed. Figure 12 shows a sheet used in reporting on the stage of completion for use of a school machine shop. Here it will be that each machine is denoted by a line across the page, and that columns are allotted to show whether ordered, shipped, delivered, motor delivered (in the case of individual motor drive), motor wired, and per cent progress toward completion of the entire job of making the machine ready for instruction purposes. A tracing was made of the chart, with a black block for the insertion of the date by the use of a rubber stamp on the blueprint. Each Friday afternoon the lines showing progress during the week were inked to represent the present status of the work. Prints were taken, and stamped with the date of the report. One copy was sent to the business manager and one to the superintendent of schools, while a third was kept on file in the director's office. This did much toward visualizing the reason why instruction could not be begun in the different shops.

Graphic Records of Production Work.

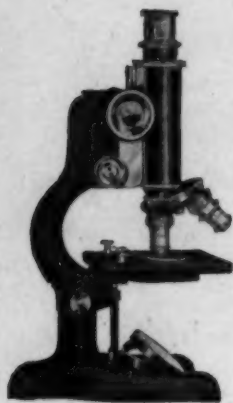
This year a similar plan is being followed in the trade shops to indicate at a glance the state of completion of a given project. Figure 13 shows such a record as used in the trade patternmaking shop at Academy High School, Erie. This chart shows the stage of completion of the patterns for a vertical spindle sander, designed in the drafting rooms. The machine has been given the number 117, and hence

the patterns are numbered 117-1, 117-2, etc. The job number refers to the envelop that has been assigned to receive the slips indicating hours of work and amounts of lumber and other materials required for each piece. Opposite the name of the student to whom the making of the pattern has been assigned is the date when he began work. Thus, the record shows that Michael Kraus began work on the base pattern No. 117-1, on September 15, and on November 1, the date this record was taken, has completed 75 per cent of his work on pattern and corebox. Ross Webb, who was assigned pattern No. 117-6, on October 1, completed it on October 6, charging his materials and time to Job No. 3847.

Each Friday the instructor appraises the amount completed during the week on each pattern, and posts the charts, or causes them to be posted, to show what progress has been made during the week. He is then in position to report promptly the stage of completion. Incidentally his attention is called to students that are not working as rapidly as he judges they should work. The chart is an incentive to the student, who naturally desires to see his line creep over the chart faster than the lines of the other fellows, like the speedy half-back on his way to a touchdown.

In the same shop a graphic record is kept of the time required by each pupil to complete the first exercise patterns used in the trade course. Figure 14 is a facsimile of the first part of this chart, which is 11 x 22 inches, made to fold and fit into a standard notebook. The chart in use is posted on a chart board in the shop. The timekeeper posts the time required for each piece from the time-clock cards to the chart. Each block indicates one hour. Thus the chart shows that Albrycht made his first

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pattern in four hours, while Boberg required seven. Boberg cut the time for the third piece to 2½ hours, while Albrycht took four hours to do the same task. And so each student has before him his record, as well as those of the entire class. He can see for himself whether he is measuring up to standard. This little device helps to overcome what has hitherto been one of the failings of trade schools, the absence of any regard for the time consumed in doing a given piece of work.

Summary.

The school executive like the forest ranger must build his watchtowers. He must not only know what is being done himself, but he must keep his board and his public informed. Attendance figures can be made concrete and real by the use of graphic charts. The perplexing summaries of school funds and their expenditure can be clearly explained by the executive that can employ graphs. He must know how to choose the form of chart that will best meet his need. Maps are an effective means of showing distribution of agencies or of agents, or for making a study of pupil housing problems. School schedules or programs are best studied through the use of movable cardboard blocks. Progress toward completion of tasks may be vividly presented through bar charts. All these aid in powerful and accurate presentation of facts.

PUBLIC PRINTING OF SCHOOL BOOKS.

(Concluded from Page 50)

art of textbook writing requires separate talent which is not at all provided in any one state. The state of Minnesota some years ago tried the experiment, and reverted back to the open market plan.

Finally, it is as illogical for a school system to print its own schoolbooks as it is to conduct its own broom factory or paper mill. Because

brooms and paper are used in the school is no reason why the state should manufacture these articles. And yet, it is no reflection on any school board to hold that it could run a broom factory with greater efficiency than it would a schoolbook publishing plant.

A school system has a high mission in hand, and can better afford to leave the making of brooms and broom handles to other agencies. The making of American citizens and upholding the traditions of the Republic is a task which comes more nearly within the function of the state than does an invasion into the domain of private industrial or commercial enterprise.

THE APPLICATION BLANK.

(Concluded from Page 56)

The questions on our application blank were approved by the late Hon. Calvin N. Kendall, commissioner of education of New Jersey, and we believe that any superintendent employing a person who can not answer them satisfactorily will soon have on his force a teacher whose pupils will drink from stagnant pools.

RECENT OFFICIAL PUBLICATIONS.

The Home Teacher. Service Series No. 1, April, 1921, National Council Catholic Women, Washington, D. C. The first of a series of pamphlets intended to assist those who go among the foreign-born women. It covers in the main the principal activities of this line of service comprising vocational guidance, health direction, home teaching in English and household arts, legal aid, libraries, entertainments and recreation.

A Preliminary Study of Standards of Growth in the Detroit Public Schools. Paul C. Packer and Arthur B. Moehlman. Research Bulletin No. 5, 1921, issued by the Board of Education, Detroit, Mich. The school's most promising point of attack on the health problem is control of the development of the child. Studies of weight and height of children several times a year make possible early detection of departure from the normal, at a time when correction is likely to be easily possible. The present study differs from many that have preceded it in the

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number of children whose sex, age, grade, nationality, height and weight have been determined under uniform conditions, in the use of the weight-height ratio as a basis of interpretation, in the care with which data and findings have been checked, and in its revelations of wide range of variation among children of even the most homogeneous age-grade sex groups. The value of the present study lies in the fact that it makes the problem perfectly evident, emphasizes the importance, and maps out the road along which ultimate success is to be found. The section in the appendix on the reliability of the measurements was prepared under the direction of Mr. C. M. Elliott, of Detroit Teachers College, and the graphic work was undertaken by Mr. H. J. Kaufman, of the Bureau of Statistics and Reference.

Statistics of Universities, Colleges, and professional Schools, 1917-18. By H. R. Bonner. Bulletin No. 34, 1920, issued by the U. S. Bureau of Education, Washington, D. C. In this report, an attempt has been made to secure certain comparative statistics from preceding reports in order to measure any changes which have taken place in the practices of such institutions. The report, therefore, portrays historical tendencies and present conditions.

Organization for Visual Instruction. By W. H. Dudley. Bulletin No. 7, 1921. Issued by the Bureau of Education, Washington, D. C. The man of vision and mental reach today thinks of the motion picture in terms of service to education, to commerce and industry, to science and art, to religion and philanthropy. Visual instruction service, to be worth while, requires careful organization and administration, the adoption of a definite policy, a study of the needs of borrowers, and unceasing attention to mechanical details. The present pamphlet has been prepared by the author with a view of being of assistance in this matter and in doing so, he has drawn largely upon his own experience in Wisconsin, where as chief of the visual instruction bureau of the University Extension Division, he has built up a system which has attracted nationwide attention. Mr. Dudley, in his report, discusses educational use of motion pictures, organization and operation of the bureau, visual instruction service, and closes with a description of a typical bureau of visual instruction.